# Eighteen Years in Lebanon and Two *Intifadas*: The Israeli Defense Force and the U.S. Army Operational Environment

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Title of Monograph: Eighteen Years in Lebanon and Two *Intifadas*: The Israeli Defense Force and the U.S. Army Operational Environment

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#### **Abstract**

"Eighteen Years in Lebanon and Two *Intifadas*: The Israeli Defense Force and the U.S. Army Operational Environment" by Major Richard D. Creed, Jr., Armor, seventy-eight pages.

This monograph determined that the tactical and strategic experience of the Israeli Defense Force (IDF) since 1981 was relevant to the future operational environment of the U.S. Army. The IDF's experiences are relevant because the Israeli Army was similarly equipped and organized to the heavy units in the U.S. Army, both then and now. Israel faced a similar full spectrum threat, and the IDF had to adapt to enemies who switched to asymmetric methods in order to overcome Israel's conventional military superiority. The IDF of 1981 paralleled the U.S. Army of the 2000 in many ways. It was a mechanized heavy force designed to conduct operations against a Soviet armed and equipped enemy. It fought and defeated some of those enemies decisively eight years previously. Beginning with the invasion of Lebanon (Operation "Peace for Galilee"), the IDF discovered that there were no peer competitors willing to fight it on its own terms. The nature of war changed for the IDF in sometimes unexpected ways, and it struggled to adapt to its changing operational environment. The IDF operational environment became much more complicated, because while it retained the old threats in the form of its Arab neighbors, it added sustained guerrilla war and civil insurrection.

This paper summarized the trends and characteristics of the U.S. Army's Contemporary Operational Environment (COE) and used them as the basis of comparison with the IDF operational environment. IDF operations in Lebanon and the two Palestinian Intifadas represented the trends of the IDF operational environment. All of the COE characteristics were present in the IDF operational environment in some form. Nine of the fourteen COE characteristics were present in the IDF operational environment to a significant degree. The comparison between the two operational environments was valid.

Having determined that the two operational environments were similar, the remainder of the paper analyzed how the well the IDF adapted to its operational environment. The goal was to determine whether there were lessons relevant to the U.S. Army as it undergoes Transformation. The IDF was at least partially successful adapting to seven characteristics: asymmetry, constrained resources, force protection, information operations, rapidity, homeland sanctuary, and complex and urban terrain. IDF adaptation to those seven characteristics had implications from which it was possible to make recommendations about the course of Transformation.

This paper recommended that the U.S. Army pay particularly close attention to the way that the IDF adapted its mechanized and armored units to survive in complex and urban terrain. The IDF's operational environment in Lebanon was so hostile that information superiority had negligible impact on force protection. Since everyone was potentially a threat, successful enemy attacks were inevitable over time. Vehicle survivability provided force protection, which in turn gave Israel's political leadership policy options. The IDF experience confirmed that homeland sanctuary is no longer possible, and that the effort must be joint and multi-agency.

The ability to adapt to the rapidity of the operational environment demanded real time intelligence. More importantly, it required both the will and the authority at the proper levels to act on that intelligence while it was still of value. The U.S. Army needs to incorporate asymmetry into its gunnery and tactical training. It also needs to ensure that the opposing forces at the training centers be used to determine likely asymmetric methods of attack against friendly forces and use them so that friendly units can determine countermeasures. None of the findings of this

monograph were revolutionary or breathtaking. There were no IDF adaptations that the U.S. Army could not improve upon, as long as it has the will to do so.

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#### **CHAPTER ONE**

#### Introduction

#### Relevance

United States Army Transformation is motivated largely by the recognition that the world has changed significantly since the collapse of the Soviet Union. The current Army force structure, and until the recent publication of FM 3.0, its doctrine, were designed to defeat enemies equipped and trained like the Red Army. The collapse of European communism, the crushing military defeat of Iraq, and lukewarm relations with China led to a shortage of enemies willing or able to fight the United States 'the old fashioned way' in a conventional war. There are still enemies to fight, as the events of September 11, 2001 demonstrated. They are, however, not willing to deliberately fight U.S. using methods that the U.S. Army is best suited to defeat.

The Contemporary Operating Environment (COE) recognizes that other nations find U.S. superiority in the western method of conventional war too overwhelming to directly challenge in the near future. It is possible to argue that the U.S. Army has become a victim of its own success. Because of its technological and operational superiority in mechanized combat, potential enemies increasingly seek to achieve military or political objectives differently as a simple matter of survival. States have learned by experience (Iraq) or observation that fighting America on its own terms is not the path to success. What formerly was considered irregular or unconventional warfare may now be institutionalized worldwide as the primary means of waging war against the United States of America.

During the 1980s, when the U.S. focused its training and doctrine on fighting the Soviet Union in Europe, the Israelis fought against enemies who had learned hard lessons about fighting the

Israel Defense Forces (IDF) on its own terms. Defeated four consecutive times in conventional wars since 1948, the various Arab states saw little benefit in confronting the IDF directly. Since the beginning of the Invasion of Lebanon in 1982, the Arabs in general and the Palestinians in particular enjoyed arguably far greater success using indirect and asymmetric methods against Israel. The IDF found itself fighting an offensive action against the Palestinian Liberation Organization (PLO) and other irregular elements in complex terrain for which it was not organized, equipped, or trained to fight. The PLO, Hamas, Hizbollah, and their patrons can claim to have waged war successfully against the IDF for twenty years by not losing. The operational environment the IDF faced in Lebanon, and later, in the Palestinian *Intifadas*, closely resembles the one defined for the U.S. forces by TRADOC DCSINT.<sup>2</sup>

Much as the Spanish Civil War in the late 1930s provided glimpses about the nature of World War II, the Israeli Defense Force experience since the early 1980s offers potential insights into how the U.S. Army might adapt to its new operational environment. The IDF faced a full spectrum threat that differed from that of the U.S. more in scale and geographical exclusivity than in substance. Because of its position of being constantly engaged in a conflict of national survival, the IDF had a powerful incentive to adapt to their world as it really was, and not how previous experience had shown it to be.

#### Methodology

The purpose of this paper was to answer the question of whether the tactical and strategic experience of the IDF since 1981 was relevant to the future operational environment predicted for the U.S. Army. This paper summarized the trends and characteristics of the U.S. Army's

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<sup>&</sup>lt;sup>1</sup> Martin Van Creveld, *The Sword and the Olive: A Critical History of the Israeli Defense Force* (New York: Public Affairs, 1998), 296.

<sup>&</sup>lt;sup>2</sup> United States Army Training and Doctrine Command Deputy Chief of Staff - Intelligence, White Paper: *Capturing the Operational Environment* (Fort Leavenworth, Kan.: Combined Arms Center (CAC) Threat Support Directorate, 2 February 2000; see also *The Future Operational Environment* (CAC, 4 May 2001)

Contemporary Operational Environment (COE) and used them as the basis of comparison with the IDF operational environment. IDF operations in Lebanon and the two Palestinian Intifadas represented the trends of the IDF operational environment. All of the COE characteristics were present in the IDF operational environment in some form. Nine of the fourteen COE characteristics were present in the IDF operational environment to a significant degree. The comparison between the two operational environments was valid.

Having determined that the two operational environments were similar, the remainder of the paper analyzed how the well the IDF adapted to its operational environment. The goal was to determine whether there were lessons relevant to the U.S. Army as it undergoes Transformation. The IDF was at least partially successful adapting to seven characteristics: asymmetry, constrained resources, force protection, information operations, rapidity, homeland sanctuary, and complex and urban terrain. IDF adaptation to those seven characteristics had implications from which it was possible to make recommendations about the course of U.S. Army Transformation.

This monograph determined that the tactical and strategic experiences of the Israeli Defense Forces since 1982 are relevant to the U.S. Army as it adapts to the Contemporary Operational Environment. The IDF's experiences were relevant because the Israeli Army was similarly equipped and organized as the U.S. Army, both then and now. It faced a similar full spectrum threat, and had to adapt to enemies who switched to asymmetric methods in order to overcome the IDF's conventional military superiority. While the IDF did not successfully adapt to every characteristic of its operational environment, its successful adaptations provided lessons relevant to U.S. Army Transformation.

#### **CHAPTER TWO**

# The U.S. Army's Contemporary Operating Environment

"In a conventional fight ... the United States possesses a significant overmatch of warfighting capabilities across all spectrums of conflict. Therefore, it is unlikely that any thinking opponent will seek to fight U.S. force-on-force until they develop doctrine, structure and/or technology that provides them an advantage under circumstances of their choosing."

TRADOC White Paper: "Capturing the Operational Environment," 2 February 2000.

The purpose of this chapter is not to debate or question official U.S. Army views about the Contemporary Operational Environment (COE). This chapter provides the reader a concise summary and clear understanding of the COE. Its intent is to summarize the trends and characteristics of the COE. It is the benchmark against which the IDF operational environment will be compared in the next chapter. The U.S. Army's corporate viewpoint about the nature of the COE and the likely nature of the Future Operational Environment (FOE) is congruent with that of numerous civilian writers, scholars, and the Defense Department, and is accepted here without challenge.<sup>4</sup>

The U.S. Army defined its new operational environment for training in a White Paper titled "Capturing the Operational Environment," published by the TRADOC Deputy Chief of Staff - Intelligence (DSCINT) on 2 February 2000. The purpose of the White Paper was to capture "the current and future operational environments (OEs) for U.S. Military operations" in terms of threats

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<sup>&</sup>lt;sup>3</sup> Ibid., 9.

<sup>&</sup>lt;sup>4</sup> For a social and political perspective, see Robert Kaplan's *The Coming Anarchy* (New York: Random House, 2000). *The Emerging Strategic Environment* (Westport, Connecticut: Praeger, 1999), a collection of essays on strategic issues pertaining to Europe and the Middle East edited by Williamson Murray, attempts to define the future strategic environment in a more military sense. Other examples of congruence include

and create a realistic training environment for the Army. The Army needed a realistic threat to train against, one that reflected the world as it is today. The Future Operational Environment, published 4 May 2001, summarized the new OE and attempted to predict how threats might look in the not too distant future. The summary of the trends and characteristics of the COE in the remainder of this chapter comes from both documents.

#### **Trends**

TRADOC identified certain general trends in the world that affect current and future U.S.

Army operations and provide context for the characteristics of the COE. This section summarizes the trends from *Capturing the Operational Environment* in narrative form and adds some examples from recent history. Some of the trends were apparent even during the Cold War, but because the U.S. Army focused its institutional priorities on the Soviet Union and its clients, the trends had marginal impact on its thinking or doctrine. Most trends are interrelated, and some have manifested themselves in watershed events like the collapse of Yugoslavia, the attack on U.S. embassies in Africa, the attack on the U.S.S Cole, and the attack on the World Trade Center. They provide context for current and future Army operations, and in most cases play a role in the cause and effect of potential future conflicts. The trends that follow in the remainder of this section come from "Capturing the Operational Environment" and provide context for the defining military characteristics of the COE.

While nation-states are still the dominant actors, some power is shifting to political, economic, cultural, religious, and environmental actors motivated by personal or group agendas different from

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*Global Security Concerns* and the 30 September 2001 *Quadrennial Defense Review Report* listed in the bibliography.

<sup>&</sup>lt;sup>5</sup> Capturing the Operational Environment, 3. A summary of the threat dimension of the operational environment is in FM 3-0 *Operations*, 1-8 to 1-9.

<sup>&</sup>lt;sup>6</sup> Ibid., Trends from pp. 6-7.

or even hostile to, the interests of traditional nation states. The European Union, Al-Qaeda, and international drug cartels are examples of entities pursuing agendas different or hostile to nation states. The European Union seeks to submerge the individual sovereignty of its member states for the collective economic benefit of all Europeans. Osama Bin-Laden's Al-Qaeda wants to push the United States out of the Saudi Arabian "holy land." International drug cartels sell their products in the pursuit of money and influence, dominating the domestic affairs of weak states like Colombia. These shifts in power threaten the independent existence of weak nations and potentially the security of the remainder.

Although the United States remains globally engaged as the world's hegemon, the distribution of power throughout the world remains in flux. In relation to any one other nation, the U.S. is stronger than it has ever been in the past. Relative to the rest of the world taken together, it may be more vulnerable than ever before. The continental United States is vulnerable to attack, and is arguably at greater risk of attack than during the Cold War. Russia and China retain the ability to target the U.S. with nuclear weapons, weapons of mass destruction continue to proliferate despite international efforts, and the open nature of American society makes it vulnerable to terrorist attack. In a multi-polar world, various states may combine their efforts in pursuit of goals not necessarily obvious to the U.S., upsetting local or regional stability and challenging U.S. interests.

Weak nation states can fragment violently along tribal, ethnic, religious, and socioeconomic lines. Fragmentation often occurs in ugly ways, with profound second and third order effects. Many of the groups agitating for or causing fragmentation pursue terror, ethnic cleansing, or genocide to achieve their goals. Lebanon, Yugoslavia and Rwanda have undergone such

<sup>&</sup>lt;sup>7</sup> Ahmed S. Hashim, "The World According to Osama Bin Laden: A Philosophy of Islamic Action" (Newport, Rhode Island: 12 October 2001), 23.

<sup>&</sup>lt;sup>8</sup> Anthony H. Cordesman's *Weapons of Mass Destruction in Iraq* (Washington, D.C.: Center for Strategic and International Studies, 1999) provides a chilling summary of Iraq's program to accumulate WMD.

fragmentation, creating large numbers of refugees. Large numbers of refugees seeking safety or economic relief often create tension with neighboring states, which often lack the infrastructure and resources to handle the influx and may themselves become vulnerable to fragmentation.

Scarce resources and growing populations in developing or failed states exacerbate domestic, regional, and international tension. Greater tension increases the possibility of violence within and among states. Water has already become a source of friction between states in the Middle East and Africa. Violence fueled by competition over scarce resources can increase the number of failed, fragmented, or weak states.

The growing imbalance of power between developed and undeveloped states increases the likelihood of developed states intervening to prevent the loss of life associated with genocide, ethnic cleansing, state sponsored terrorism, or famine. As the sole remaining superpower, many states expect the U.S. to lead coalitions that intervene in undeveloped states to protect people and restore order. The developed world wants to maintain order to protect its economic interests, and domestic political interests may push for intervention for reasons of justice and morality. Because the American public may view a cause as just and the conventional military risks as small, the likelihood of the U.S. Army performing such missions may remain high. The U.S. Army's participation in multinational missions in the Balkans, Somalia, Haiti, and East Timor are examples of this trend. Since it has unique military capabilities, the U.S. can expect a role in future multinational interventions.

The focus of military alliances shift from supporting one side or the other in the Cold War to maintaining the status quo and acquiring advanced military technology. Those with the technology

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<sup>&</sup>lt;sup>9</sup> Michael I. Handel, "The Middle East Predicament", in *The Emerging Strategic Environment*, Williamson Murray, ed. (Westport, Conn.: Praeger, 1999), 40-45.

<sup>&</sup>lt;sup>10</sup> USIS Washington File, Transcript: "Clinton Meets with Rwandan Genocide Survivors," at http://www.usinfor.state.gov./regional/af/prestrip/w980325a.htm, last visited 3/11/2002. President Clinton's speech in Rwanda indicated that the U.S. would not stand by and allow another Rwanda type genocide to occur again.

advantage, particularly the U.S. and its Western allies, seek to maintain it with regard to the rest of the world. Those without domestic sources of advanced military technology will seek to acquire that which benefits their own particular situation. Regional powers like Iran and China could share military technology to counter U.S. dominance and increase the local advantage they have over their neighbors.

Economic interdependence between states increases the demand for precision military strike capability to minimize collateral damage, leading to a mingling of foreign and domestic policy. The U.S. sought to avoid damaging property owned by friendly nations in Belgrade during its bombing campaign. Companies with large investments overseas may pressure a government to conduct military operations in such a way as to minimize damage to those investments. U.S. operations during Desert Storm avoided damaging oil production platforms as much as possible to minimize the long-term economic impact of restricted oil flow on friendly nations like Japan.

Advanced technology with military applications and modern weaponry, to include weapons of mass destruction, continue to proliferate. It will probably remain impossible to prevent the proliferation of all advanced weapons. Logically then, the U.S. Army has a role in preventing their use. Enemies can occasionally achieve surprise and local parity through their use of advanced technology in specific situations.

Enemies can also use existing weapons in asymmetrical ways to gain a temporary advantage. The advantage lasts for some discrete period, until some suitable countermeasure is found.

Because the U.S. must generally project its combat power great distances, there are potential windows of opportunity for an enemy to exploit an asymmetric advantage before the U.S. can provide an effective countermeasure. The Somali's use of rocket-propelled grenades in Mogadishu was an example of using old technology in an asymmetric manner to create a problem

the U.S. Army solved by deploying heavier units. The enemy militias maintained their asymmetric advantage until those units arrived in theater.

These trends can manifest themselves separately or together depending on the nature of the states or groups involved and what motivates them. The trends described by the COE help generate its characteristics. They are thus critical to the understanding of the unique nature of each situation in which military operations take place. The trends of the COE are often found in historical events like the Palestinian *Intifadas* or the IDF's invasion of Lebanon. Since the trends provide the context within which military operations take place, the use of specific examples defines the characteristics of contemporary military operations more precisely than the general definitions used in the COE.

#### **Characteristics of Military Operations**

#### Operations on complex and urban terrain

Opponents want to fight the U.S. Army in urban areas or complex terrain whenever possible, in order to negate its technological advantages in communications, intelligence, and weapons standoff. Complex terrain often slows the movement of heavy mechanized forces, and urban areas make it more difficult for heavy forces to mass combat power or protect themselves. It becomes more difficult to avoid fighting in urban areas because that is where an ever-increasing percentage of the world's population lives. Enemies suspect that they can negate the U.S. Army's firepower advantage in urban areas, because the proximity of civilians increases the level of political and legal restrictions on U.S. forces. Enemies operate in population centers because populations themselves offer both cover and concealment. Fighting in urban areas or complex terrain is potentially more expensive in terms of casualties, systems, and time for the U.S. Army than combat in open or moderate terrain. Urban and complex terrain potentially reduces the

effectiveness of friendly information operations by hindering the acquisition capabilities of technical systems and making collection platforms more vulnerable to attack.

#### Information warfare and information operations

Information operations (IO) become increasingly important as the technology to wage sophisticated information warfare becomes more readily available. Since information operations can transform tactical events into "issues of strategic importance", they offer the enemy opportunities to win victories cheaply in the courts of local and world opinion. <sup>11</sup> Potential enemies can use IO to gain psychological advantages by portraying defeat as victory, or small victories as large ones. The enemy wants to use information operations and systems attacks to reduce American national will and disrupt as many technologically based systems as possible. Some information systems, such as global positioning systems (GPS), are completely dependent upon space-based platforms. Over time, those platforms may become more vulnerable to interdiction.

### **Space Operations**

Access to information from commercial satellites decreases the asymmetric advantage the U.S. has from its own systems and levels the playing field for those opponents able to buy such access. Enemy access to commercial space based information, surveillance, and reconnaissance (ISR) systems increases his situational awareness and ability to use precision targeting. Since the U.S. continues to become even more reliant on space-based information systems, U.S. space-based assets must be protected from interdiction or destruction. U.S. reliance on such systems constitutes a potential weakness to an enemy able to disrupt them.

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<sup>&</sup>lt;sup>11</sup>Capturing the Operational Environment, 12.

#### Power Projection from the Continental United States (CONUS)

Potential enemies are now focused on disrupting U.S. power projection from CONUS by attacking likely ports of debarkation and denying the ability to build up combat power in an overseas theater unimpeded by hostile action. The enemy may use weapons of mass destruction to conduct entry denial operations at ports of debarkation. Regardless of what weapons he uses, he wants to disrupt or even block force projection operations as much as possible. Both domestic and overseas staging bases are likely strategic targets, meaning that there is no longer any true homeland sanctuary for U.S. forces.

#### No homeland sanctuary available

U.S. territory is now part of the strategic communications zone and is vulnerable to attack. Force protection is now a concern at every stage of the force projection process. Since the enemy seeks to exploit some form of asymmetry, he is not necessarily looking to target combat forces. The U.S. homeland itself becomes a target for enemy action, since it is more difficult to protect than the military forces that defend it. The Pentagon and the World Trade Center were obviously such targets. It is unclear what impact domestic vulnerability of U.S. citizens would have on the morale of U.S. combat forces deployed on missions overseas, however that morale might be the target of terror attacks.

#### Limitations on Force Capabilities

Domestic and international political restrictions determine the size and capability of deployed forces. Clever opponents may seek to change the nature of the conflict once force projection operations begin, to render those forces irrelevant to the problem at hand once they deploy. Iraq

has done this to the U.S. numerous times since 1991 by moving ground forces and triggering deployment of additional U.S. ground forces into the theater, and then doing nothing. Deployed ground forces became irrelevant as soon as they arrived. Once the U.S. commits a particular force on an operation, an enemy may change the nature of his operations to either nullify the U.S. aim or make the deployed force unsuitable for the mission for which it was deployed.

#### Complex relationships

The U.S. Army normally operates as part of a coalition or alliance with other nations. It operates with other U.S. agencies, allied armies, non-governmental organizations, and the U.N. during the conduct of military operations. These relationships are complex, not only between the Army and such entities, but between the entities themselves. The historical presence of distrust, language difficulties, interoperability issues, and differences in motives remain challenges. U.S. forces deal with such complex religious, ethnic, and coalition relationships during their ongoing combined operations in the Balkans. The U.S. Army works with the French and Russian Armies, whose governments may have different agendas than the U.S.

Complex relationships often define the problems which U.S. forces are called or sent in to solve. Failed or failing states with multiple factions, hostile ethnic groups, or religious extremism contain large numbers of complex relationships. Outside states with interests in the welfare of parties or factions inside a failed state, like the Russians in the former Yugoslavia or the Pakistanis in Afghanistan, increase the complexity of the problem. The U.S. Army should be prepared to deal with subtle distinctions, ancient enmities, religious strife, and unusual cultural perspectives in the COE.

#### Rules of Engagement (ROE)

Enemies can exploit the complex relationships of friendly coalitions and the restrictions or limitations of U.S. and allied rules ROE to achieve an advantage. Enemies may influence the establishment of more restrictive ROE by their use of information operations that attack national will, by influencing opinion shapers and decision-makers. An enemy that knows the friendly ROE may be able to temporarily create an advantage by exploiting some unforeseen friendly weakness in it before friendly forces can adjust. Potential enemies may follow no discernable ROE, while fellow coalition members follow ROE that restrict their employment during operations.

#### Media

The media plays a role in enemy information operations, because the enemy seeks to control his internal media while exploiting the external (world and U.S.) media to attack U.S. will. The U.S., along with its most likely coalition allies in Western Europe, Japan, and Australia, is potentially more susceptible to media influence than other nations because of its widespread public access to information. A global media combined with the explosion of information make it almost impossible for a government to control how its citizens view events. The media magnifies the importance of force protection failures, because casualties are news and mass casualties are big news. The enemy seeks to exploit the effects of mass casualties on the American national will, thinking it has drawn lessons from previous U.S. operations in places like Beirut and Somalia. Somalia.

#### Constrained resources

The U.S. Army continues to operate with limited resources of time, personnel, and equipment.

This is not a new state of affairs, but potential enemies can conceivably exploit it more easily than

<sup>&</sup>lt;sup>12</sup> Ibid 14

<sup>&</sup>lt;sup>13</sup> Capturing the Operational Environment, Appendix A.

in the past. Globalization of technology can decrease the relative advantage of U.S. forces. Enemies who are not doctrinally driven and who do not have deliberate acquisition processes could field some types of modern equipment more quickly than U.S. forces, giving them a temporary advantage in a niche capability. Enemies not concerned with full spectrum operations can concentrate their resources in specific areas. Recently purchased off-the-shelf items like computers and cellular phones are examples of things that potential enemies could exploit to their advantage, because those technologies often advance faster than the U.S. acquisition process and are almost universally available.

#### **Ambiguity**

Enemies may seek to increase the ambiguity of a situation through information operations, in an attempt to stay below the threshold of clear aggression and increase the difficulty decision-makers have establishing political consensus. By changing the nature of the conflict after the Army deploys, the enemy can attack America's perceived weakness of avoiding long-term commitments. Ambiguity means that there are often no clear-cut good guys and bad guys. All parties could be equally culpable in the dispute that U.S. forces are trying to settle. U.S. forces conducting peace operations in the Balkans faced such ambiguity regularly.

#### Rapidity

As the world's ability to communicate and move information increases, the concept of time compresses. Potential enemies can adapt more quickly because they can obtain information faster than they could before. Technology allows more armies to fight at night and in all types of weather, which increases the operational tempo for all armies significantly. The enemy wants to

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 $<sup>^{14}\,\</sup>mathrm{FM}$  3-0 Operations addresses this in paragraph 1-29, page 1-9.

establish a rapid tempo of operations early to seize his objectives before the U.S. can react, and then prolong the conflict by avoiding decisive engagement as long as possible. U.S. forces must move more quickly to gain and maintain the advantage, and might be asked to pre-empt an enemy attack before it happens or preclude it as it begins.<sup>15</sup>

#### Asymmetry

Asymmetric warfare focuses one side's comparative advantage against an enemy's relative weakness. <sup>16</sup> The attack on the World Trade Center was an example of a relatively weak enemy exploiting the suicidal dedication of its human materiel to conduct attacks against undefended symbols of U.S. power. U.S. bombing operations in Afghanistan were also asymmetrical, in that overwhelming force struck the enemy using means against which he had no effective defense. Because of the rapid pace of worldwide technological and social change, there has a great diversity of military capabilities. "Asymmetry will be the dominant characteristic of armed conflict" for as long as the diversity of capabilities remains large. <sup>17</sup>

#### Force Protection

Force protection becomes critical throughout operations, because the enemy wants to lessen U.S. national will with mass casualties.<sup>18</sup> Enemy actions become more force oriented. Future adversaries wish to inflict large numbers of casualties on U.S. forces as rapidly as possible, perhaps before U.S. forces realize they are in a conflict. The enemy does this by conducting sophisticated ambushes not necessarily linked to traditional maneuver or ground objectives. He focuses on destroying high visibility assets and causing mass casualties. Foreign journals

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<sup>&</sup>lt;sup>15</sup> TRADOC DCSINT, The Future Operational Environment, 4.

<sup>&</sup>lt;sup>16</sup>Capturing the Operational Environment, 14.

<sup>&</sup>lt;sup>17</sup> Steven Metz, *Armed Conflict in the 21<sup>st</sup> Century: The Information Revolution and Post-Modern Warfare* (Carlisle, Pennsylvania: Strategic Studies Institute, U.S. Army War College), ix. <sup>18</sup> FM 3-0. 4-9.

unanimously declare that mass casualties are the U.S. strategic center of gravity, and future enemies plan to use weapons of mass destruction (WMD), terrorism, rockets, and artillery to do so. 19

#### **Summary**

This chapter summarized the trends and fourteen characteristics of military operations in the Contemporary Operational Environment. An analysis of the trends and characteristics present during recent military operations makes it possible to predict how future enemies plan to fight the U.S. Army. The trends found in the COE indicate that large parts of the world are sliding into disorder, and that the disorder can affect the United States enough to warrant military action. The fourteen characteristics of the COE indicate that the U.S. Army can expect to conduct operations in an increasingly complex environment. Taken together, the trends and characteristics represent an operational environment that is completely different from the one for which the U.S. Army was designed.

This chapter summarized the COE in order to provide a benchmark for comparison with the IDF operational environment of the past twenty years. The next chapter uses the trends and fourteen characteristics of the COE to examine the IDF operational environment since 1982 in order to determine how similar it was to what the COE postulates. The degree of similarity between the two can help to determine the relevance of the IDF experience as it attempted to adapt to the changes in its operational environment.

<sup>19</sup> Capturing the Operational Environment, 15. See comments by Qiao Liang and Wang Xiangsui of the PRC in Unrestricted Warfare (Beijing: PLA Literature and Arts Publishing house, February 1999), 79.

#### **CHAPTER THREE**

## **The IDF Operational Environment Since 1982**

"As for the enemy, the importance of this strategy is to eliminate the gap in his army between relaxation and readiness. In this we have had considerable success. This leads to enemy exhaustion through continuous operations, whether by attacking military and industrial targets or by destroying shipping lines wherever they are." Yasser Arafat <sup>20</sup>

Analysis of the IDF operational environment since 1982 clearly demonstrates a strong similarity to the contemporary and future operational environment postulated for the U.S. Army. Lebanon, the West Bank, and Gaza encompassed most of the trends in the COE. Some form of every characteristic in the COE could be found in IDF operations in Lebanon and against the *Intifadas*. Nine of the fourteen characteristics were present to a significant degree, indicating that there was a strong correlation between the IDF operational environment and the COE. This chapter demonstrates the correlation by using the IDF's Lebanese operations and the two Palestinian *Intifadas* as examples of the trends found in the U.S. Army COE. It then determines to what degree the characteristics of the COE were present in IDF operational environment.

While more limited in a geographic sense than the U.S. Army's operational environment, the IDF operational environment shared most of its complex characteristics. The IDF operational environment encompassed threats from nation states, transnational actors, and domestic unrest in the form of the Palestinian *Intifadas*. Until 1982, both the U.S. and Israel planned to fight enemies organized, equipped, and trained on the Soviet model in conventional mechanized combat. After 1982, the IDF could no longer expect to successfully operate on its own terms using the methods to which it had become accustomed.

This chapter uses three events to define the trends of the Israeli operational environment during the past twenty years: The invasion of Lebanon (Operation "Peace for Galilee") in 1982, the first Palestinian *Intifada* (uprising) that occurred between 1987 and 1993, and the ongoing second Palestinian Intifada that began in 2000. These three events were the most critical challenges the IDF faced. During this period, the nature of war changed for the Israeli Army.

The IDF could no longer exclusively focus on fighting conventional mechanized war with Syria, Egypt, or Jordan, although those threats continued to exist. New dangers appeared across the spectrum of military operations. Syria, Iraq, and Iran developed the capability to attack Israel with WMD.<sup>21</sup> The threat environment included an increasingly aggressive Palestinian nation in search of a state. It also included violent transnational organizations like Hamas and Hizbollah, whose aims varied from support for the Palestinian cause, to the expulsion of Israel from Lebanon, and even the destruction Israel. Ethnic nationalism, religious fanaticism, WMD, transnational actors, and regional complexity were all a part of the IDF operational environment. Its operational environment became more complex and the threats more resistant to conventional military solutions by an army trained and equipped along Western lines for mechanized warfare.

#### Lebanon

Looked at through the lens of U.S. Army COE trends, Lebanon was a failed state fractured along ethnic and religious lines. Israel viewed the anarchy in Lebanon as a security threat to her own borders, and looked for a military solution that would restore some semblance of order. Operation "Peace for Galilee," the Israeli invasion of Lebanon, was an attempt to over-run Palestinian Liberation Army (PLO) strongholds in Southern Lebanon and push the PLO north

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<sup>&</sup>lt;sup>20</sup> Jay Mallin, Terror and Urban Guerillas, A Study of Tactics and Documents (University of Miami Press, 1982), 48.

approximately 25 miles, beyond rocket range of Israeli settlements. Despite its official limited political objective, the military plan devised by Defense Minister Ariel Sharon was to defeat the PLO decisively and eject both them and the Syrians out of Lebanon with the help of Christian militias in Beirut.<sup>22</sup> The mismatch in political and military objectives added unnecessary political complexity and friction to the operational environment.

The IDF achieved its geographical military objectives, defeated its conventional enemies in battle, and still failed to meet its war aim of long-term security. The IDF forced the PLO leadership into exile, but new local leadership rose to fill the vacuum. Unlike previous Arab-Israeli conflicts, the IDF conducted most of its operations against largely irregular forces in terrain poorly suited for fast moving armored and mechanized forces. It was not able to decisively defeat its irregular light enemies in Beirut or the mountains, and it was not prepared to wage the type of protracted war necessary to guarantee long-term success.

Despite fielding their best-equipped and supported army ever, the IDF was poorly prepared to fight the type of war it found in the Lebanese operational environment.<sup>23</sup> Direct conflict between the IDF and the Syrian Army was limited, since both sides wanted to avoid general war. Unlike the Syrians and the Israelis, however, the local Palestinian militias fought an all out war to protect their homes and families. The IDF toughest opponents were not the Syrians or the PLO combat formations, but the militias defending their homes and families around the refugee camps.<sup>24</sup> In previous wars the majority of fighting took place in deserts and lightly populated areas. Lebanon's

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<sup>&</sup>lt;sup>21</sup> Andrew Duncan, "Fifty years on, Israel still tied to circles of defence" –PART ONE. *Jane's Intelligence Review*, 10/9 (September 1998), 23-24. Also, see Handel, 48.

<sup>&</sup>lt;sup>22</sup> Martin Van Creveld, *The Sword and the Olive: A Critical History of the Israeli Defense Force* (New York: Public Affairs, 1998), 290-291.

<sup>&</sup>lt;sup>23</sup> Chaim Herzog, *The Arab-Israeli Wars* (New York: Vintage Books, 1984), 363-364, and Van Creveld, 296. While pro-Israeli and a former Israeli ambassador to the UN, Herzog provided a clear, concise account of events.

<sup>&</sup>lt;sup>24</sup> Ze'ev Schiff, *A History of the Israeli Army, 1874 to the Present* (New York: MacMillan Publishing Company, 1985), 253.

complex terrain, numerous towns, and limited road network presented new types of problems for the IDF.

The IDF's shortcomings in Lebanon gave its opponents opportunities to leverage into potential long-term success. After Israel's Christian militia allies massacred Palestinians in the Sabra and Shatilla refugee camps, domestic and world political pressure worked in conjunction with mounting casualties from Arab irregular forces to push the IDF out of Beirut and into a recently evacuated security belt in southern Lebanon. Arab success, or perceived success, in forcing the IDF withdrawal from Beirut back to southern Lebanon provided Israel's enemies with a promising new method to offset its superiority in open mechanized combat. The IDF faced a spectrum of low tech threats that [ran] the gamut from weapons of mass destruction, to acts of terrorism, to children throwing rocks at soldiers as part of an orchestrated campaign designed to achieve political ends.

Israel also misunderstood the nature of the Lebanese State. Israel considered Lebanon a state in name only, and hoped ejecting the PLO would enable the Christian led government to restore order. Demographics and local politics worked against them, as the Christians were an unpopular and shrinking minority within the country. Israel underestimated the violent reaction that various Arab elements in and out of the country would have when she occupied an Arab capital, and totally misunderstood the political attitudes of the Shiite majority in southern Lebanon. Page 19

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<sup>&</sup>lt;sup>25</sup> William V. O'Brien, *Law and Morality in Israel's War with the PLO* (New York: Routledge, Chapman and Hall, 1991), 202-208, and Herzog, 353-355.

<sup>&</sup>lt;sup>26</sup> Robert H. Scales, "Adaptive Enemies - Achieving Victory by Avoiding Defeat," *Joint Forces Quarterly*, No. 23 (Autumn-Winter 1999-2000), 10.

<sup>&</sup>lt;sup>27</sup> Scales, 11.

<sup>&</sup>lt;sup>28</sup> Lewis B. Ware, *Low Intensity Conflict in the Third World* (Maxwell Air Force Base, Alabama: Air University Press), 11.

<sup>&</sup>lt;sup>29</sup> Augustus Richard Norton, *Amal and the Shi'a - Struggle for the Soul of Lebanon* (Austin, Tex.: University of Texas Press, 1987), 107.

Israel's enemies had apparently adapted to the reality of their environment, enabling them to stymie their previously unstoppable foe. They would continue to adapt in ways that added complexity to the IDF operational environment, particularly during the *Intifadas* that began four years later. Violence marked the seventeen years of occupation in Lebanon, during which Hizbollah eventually managed to "inflict a death by a thousand cuts on Israel." Israel withdrew completely from Lebanon in 2000, militarily undefeated but unable to declare victory.

#### The Palestinian Intifadas

The first Palestinian *Intifada*, or uprising, was a "militant but essentially unarmed civil insurrection" that protested Israeli colonial rule of the West Bank and Gaza. It ultimately persuaded a majority of Israelis that a Palestinian state was acceptable.<sup>31</sup> Palestinian discontent was a result of both political and economic frustration. The uprising consisted of mass protests reminiscent of U.S. civil rights marches, groups of young men and children throwing rocks and using slingshots to battle police and IDF units, and sophisticated manipulation of the media to get the Palestinian side of the argument out to the Western world.<sup>32</sup> The uprising itself had aspects that were both organized and spontaneous, and the ability of local Palestinian leaders to use existing social organizations to exploit spontaneous outbreaks of protest caught the Israelis off guard.<sup>33</sup>

Because the official PLO leadership was in exile, local Palestinian leaders gained and exerted control over the *Intifada* movement. Those same leaders thus gained a measure of control over Palestinian nationalism and the direction it would take in the future. Leaders of factions that

<sup>&</sup>lt;sup>30</sup> Lee Hockstader, "Guerrillas Fight Israeli Army to Stalemate", Washington Post, February 13, 2000, A23.

<sup>&</sup>lt;sup>31</sup> R. Hammami and Salim Tamari, "The Second Uprising: End or New Beginning," *Journal of Palestine Studies*, 30/2 (Winter 2001), 5.

<sup>&</sup>lt;sup>32</sup> Joost R. Hiltermann, *Behind the Intifada – Labor and Women's Movements in the Occupied Territories* (Princeton, New Jersey: Princeton University Press, 1991), x-xi.

<sup>&</sup>lt;sup>33</sup> Ibid., 174-175.

participated in the first *Intifada* gained the moral authority and credibility to wage the struggle as they saw fit and eventually challenge Yasser Arafat's PLO in the future, particularly after the Oslo Accords and during the second *Intifada*. The Oslo Accords officially ended the first *Intifada*, although the peace was restless in the best of times. Arafat's new Palestinian Authority seemed unable to completely control locally led extremist groups like Hamas within its own territory, and did not represent the interests of those groups like Hizbollah in Lebanon. Outside powers like Iran and Syria added an additional dynamic to an already complex situation by supporting terrorist groups like Hamas, Hizbollah, and Islamic Jihad with weapons, training, and money.

The second (and ongoing) Palestinian *Intifada* has been much more violent than the first, a consequence of the "profoundly changed" political and diplomatic nature of the conflict.<sup>36</sup> Israel was now dealing with a weak de facto nation state that in Israeli and international eyes represented the interests of all the Palestinian people in their relationship with Israel. It did not. Palestinians were frustrated and angry that there was little tangible progress on the ground since the Oslo Accords. Extremist groups such as Islamic Jihad and Hamas played a larger role than during the earlier troubles because they perceived that the Palestinian Authority was not acting in the true interests of the Palestinian people in its dealings with Israel.<sup>37</sup> The resulting trend was one of more violence in an atmosphere increasingly less suited for political settlement.

The second *Intifada* has been marked by a generally increased number of suicide attacks against Israeli civilians in public places and increasingly violent IDF retaliations against symbols of the Palestinian Authority, suspected terrorist cells, and Palestinian settlements in the West Bank

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<sup>&</sup>lt;sup>34</sup> John L. Esposito, *The Islamic Threat – Myth or Reality* (New York: Oxford University Press, 1999), 224.

<sup>&</sup>lt;sup>35</sup> Frank L. Goldstein, "International Terrorism in the Twenty First Century," in *Global Security Concerns – Anticipating the Twenty-First Century*, ed. By Dr. Karl Magyar (Maxwell Air Force Base, Alabama: Air University Press, 1996), 296-297.

<sup>&</sup>lt;sup>36</sup> Hammami and Tamari, 5.

<sup>&</sup>lt;sup>37</sup> Esposito, 224.

and Gaza. While still conducting border patrols, checkpoint operations, and crowd control operations as during the first *Intifada*, the IDF has used attack helicopters and mechanized units to attack targets in Palestinian controlled areas. The IDF has conducted violent peace enforcement operations in response to the overall increase in Palestinian violence, with mixed results.

#### **Characteristics of the IDF Operational Environment Since 1982**

#### Operations on complex and urban terrain

Complex and urban terrain significantly hindered IDF operations during both the war in Lebanon and the *Intifadas*. The mountains of Lebanon were a significant departure from the norm for the heavily equipped IDF, and completely different from the deserts of previous campaigns. Road-bound IDF forces were vulnerable to ambush along the narrow Lebanese mountain roads and in the numerous Lebanese towns and villages that dotted them. The fighting in and around Beirut took place in one of the most challenging and comprehensive urban battlefields the IDF had ever faced. Previously, the largest urban battle the IDF conducted was in Jerusalem during the 1967 war, and that battle only lasted a few days.<sup>38</sup> The importance of IDF weapons systems that could not be used with precision in complex and urban terrain declined, since the indiscriminate use of firepower led to civilian casualties and gave the enemy a propaganda edge.<sup>39</sup>

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<sup>&</sup>lt;sup>38</sup> Van Creveld claimed on page 297 in *The Sword and the Olive* that the IDF was wary of fighting in urban areas because of the heavy casualties its paratroopers suffered in the city of Suez in 1973. Herzog described the heavy fighting and associated casualties the IDF suffered in Sidon and Tyre during "Peace for Galilee" on pp. 346-349.

<sup>&</sup>lt;sup>39</sup> Herzog, 369. IDF casualties increased from 'terrorist' attacks at the same time domestic and world opinion demanded more careful application of firepower. Herzog claimed the PLO deliberately positioned its forces behind a civilian human shield. Van Creveld in *The Sword and the Olive* declared the Israeli Air Force fundamentally "irrelevant owing to the nature of the terrain and the nature of the enemy", 295.

Most IDF confrontations with the Palestinians during the *Intifadas* occurred in or around urban areas, since that is where most Palestinians lived. The refugee camps, a primary source of discontented Palestinian young men, were and remain urban areas. The Gaza Strip is one large urban area, while the refugee camps in the West Bank are essentially suburbs of towns like Ramallah and Jericho. While the IDF has conducted sorties into Palestinian controlled urban areas periodically since 1993, it has not attempted to control them for more than a few days at a time until recently. Operations in those densely populated and hostile urban areas were manpower intensive and fraught with the danger that violent confrontations would become symbols in the ongoing information battle.

Operations in complex and urban terrain became one of the defining characteristics of the IDF's new environment and closely approximated the expectations of the U.S. Army COE.

Lebanon was generally more rugged and urban in nature than the desert terrain of the Sinai. IDF operations against the Intifadas took place largely in and around the urban ghettoes that constituted Palestinian refugee camps. Complex and urban terrain had significant impact on IDF operations during the period.

#### Information Warfare and Information Operations

Information operations played a larger role in the evolving IDF operational environment, and generally had a negative effect on the IDF, beginning with Operation "Peace for Galilee."

Information operations affected both Israeli civilians' view of the IDF, and the world's opinion of Israel. For the first time the IDF fought a war that it could not claim was vital to its own survival, and could not expect sympathy in the court of world opinion like it had during the Yom Kippur War of 1973. IDF information operations concentrated on traditional intelligence gathering and on getting civilians away from Lebanese urban battlefields.

The IDF lost the information battle in Lebanon for a variety of reasons. Because there was a discrepancy between what Prime Minister Begin's government said its aims were in Lebanon and what the IDF actually tried to do, both institutions lost credibility. The IDF's bungled casualty reporting hurt its credibility as well. <sup>40</sup> As friendly casualties mounted and word of the massacres in the refugee camps became widespread, popular sentiment turned sharply against the war. <sup>41</sup> The world held Israel accountable for civilian casualties and the atrocities committed by the Christian militias in Palestinian camps, a standard not necessarily applied to its weaker opponents. <sup>42</sup> The international media was the environment in which much of the information war took place, and the lessons learned were not lost on the PLO. The Palestinians adapted and were able to conduct sophisticated information operations during the *Intifadas*.

The Hizbollah guerrillas in Lebanon became extremely proficient at conducting information warfare, and made it one of the most important parts of its war against the IDF. It filmed its attacks against the IDF in an increasingly sophisticated manner, and those films made it onto Israeli television. Sometimes the videos were broadcast immediately after IDF spokesman denied that the IDF had been attacked. <sup>43</sup> The Hizbollah guerrilla campaign against IDF forces in South Lebanon also had as its target the morale of the Israeli population, who eventually accepted complete IDF withdrawal in May of 2000. The costs associated with a partially successful and drawn out operation were no longer acceptable to the general Israeli population. <sup>44</sup> Hizbollah information operations seemed to have a corrosive effect on both the IDF and Israeli support of IDF operations in Lebanon.

<sup>&</sup>lt;sup>40</sup> Van Creveld, 293.

<sup>&</sup>lt;sup>41</sup> Schiff, 257.

<sup>&</sup>lt;sup>42</sup> William V. O'Brien, *Law and Morality in Israel's War with the PLO* (New York: Routledge, 1991), 189-191. O'Brien convincingly demonstrates the exaggerated and one-sided international reporting that ignored IDF attempts to minimize civilian casualties and collateral damage via information operations.

<sup>&</sup>lt;sup>43</sup> Kifner, 1-4

<sup>&</sup>lt;sup>44</sup> Hockstader, 23 and Lisa Beyer, "Courage Under Fire", *Time Europe*, 5 June 2000, 155/22, http://www.time.com/time/europe/magazine/2000/0605/lebanon.html, 2-5. Visited 11/06/01.

The Palestinians compelled journalists and other opinion shapers to cover their uprising and put their side of events into the eyes of the world. <sup>45</sup> Palestinian leaders specifically targeted Israeli public opinion in an attempt to mitigate their fears about the ultimate security of Israel. 46 Israeli public opinion eventually changed enough that a critical mass of Israelis was willing to support the 1993 Oslo Accords in the hope of ending the first *Intifada*. Ironically, the increase in violence directed against Israeli civilians after the Peace Accords and during the current Intifada probably negated hopes the Palestinians may have had of using IO to persuade mainstream Israeli public opinion about the justice of their cause.<sup>47</sup>

More recently, both sides have conducted war on the Internet as well, attempting to disrupt computer networks and cause each other political embarrassment. Pro-Palestinian individuals have successfully penetrated Israeli government and banking websites, while Israel has penetrated the Hizbollah and Lebanese Army websites. 48 There probably have been more information warfare incidents on the Internet than those reported in the press.

Information operations and information warfare have been a large part of the IDF operational environment. Hizbollah information operations adversely affected IDF operations in Lebanon. Information operations played a key role in Palestinian strategy during both *Intifadas*. Information operations manifested itself in ways similar to what is predicted by the COE. The IDF's ability or inability to adapt to information operations and information warfare is therefore relevant to the U.S. Army.

<sup>&</sup>lt;sup>45</sup> Hiltermann, x-xi. Hiltermann sympathizes with the secular leftist aspects of the Palestinian cause.

<sup>&</sup>lt;sup>46</sup> Jackson Diehl, "A Radical Shift in the Intifada; Violent Tactics Gaining Favor as Uprising Enters 4<sup>th</sup> Year," The Washington Post, 8 December 1990, 10.

<sup>&</sup>lt;sup>47</sup> The election of the Netanyahu and Sharon governments and the relative weakness of the Left in recent years seem to support the idea that Israeli popular opinion hardens in the face of Palestinian violence. <sup>48</sup> "Arab Intifada – The armchair version," *The Economist*, 357/8201 (16 December 2000), 53.

#### **Space Operations**

Space operations affected the IDF much more over the past seven years than it did earlier. Israel launched its own surveillance satellite in 1995, which passed over Iraq, Iran, and Syria every ninety minutes. <sup>49</sup> This made it unlikely that Israel's neighbors could achieve the type of surprise that they did in the 1973 War, and reduced the burden of maintaining large combat formations in close proximity to the borders.

The Palestinians have exploited satellite based global communications to pursue information operations in the form of Arabic television stations sympathetic to their cause. The result was a broadening of awareness for the Palestinian struggle among fellow Arabs. The IDF's opponents could easily exploit Global Positioning System (GPS) technology by buying GPS devices 'off the shelf', and probably have accessed space-based imagery available from open sources and friendly third party governments.

While space operations played a role in the IDF's operational environment, they were a pale imitation of what is expected in the U.S. Army COE. The presence of space operations demonstrates only a vague parallel between the IDF and U.S. Army operational environments. The United States dominated space operations during the past twenty years, and Israel's imitative experience has little relevance to the U.S. Army as it adapts to the COE.

#### Power projection

The IDF operational environment did not really share force projection as a characteristic in the sense it was intended for the U.S. Army. While the IDF conducted force projection operations, three of their four major operations were raids and half were conducted by the Israeli

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<sup>&</sup>lt;sup>49</sup> Duncan, 21.

<sup>&</sup>lt;sup>50</sup> Hammami and Tamari, 10-11.

Air Force (IAF) alone.<sup>51</sup> Force projection was a characteristic of the IDF operational environment, but it was limited when compared to potential U.S. Army requirements.

The IDF invasion of Lebanon was the only example of power projection potentially relevant to the U.S. Army during the period, because it was the only operation involving significant ground forces. Operation "Peace for Galilee" was the first time the IDF projected large-scale combat power on a long-term basis beyond Israel's borders. The IDF found sustaining its forces for prolonged operations in Lebanon challenging. Opening and maintaining lines of communication and supply was difficult because Hizbollah ambushes made those lines difficult to secure and impossible to keep permanently cleared without suffering a continuous stream of casualties. Although power projection into adjacent Lebanon was challenging to the IDF, it did not require the type of strategic reach required of the U.S. Army. Because the COE envisions U.S. Army power projection to different continents, the IDF power projection experience in Lebanon was not similar enough to warrant further comparison.

#### No homeland sanctuary available

Israel's real and perceived lack of homeland sanctuary was a defining characteristic of the IDF's operational environment, and has been since 1948. This lack of homeland sanctuary manifested itself in numerous ways. Neighboring states such as Syria, Iraq, Libya and Iran have had missiles capable of reaching Israel with WMD warheads for years.<sup>53</sup> Iraq has already used such weapons against its own people, and launched WMD capable Scud missiles against Israel during the Gulf War. Cross border terrorist, artillery, and rocket attacks against Israel were

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<sup>&</sup>lt;sup>51</sup> The other examples were the 1981 bombing of the Iraqi nuclear reactor at Osirak, the 1985 bombing of PLO headquarters in Tunis, and Operation "Grapes of Wrath" in 1996.

<sup>&</sup>lt;sup>52</sup> Lieutenant Colonel David Eshel, "Armored Anti-Guerrilla Combat in South Lebanon", *Armor*, CVI/4 (July-August 1997), 26.

routine, and contributed to the military and political conditions that led to Israel's invasion of Lebanon.<sup>54</sup>

Although the IDF conducted the invasion of Lebanon to protect Israel from artillery and rocket attacks and terrorist infiltration across its borders, it never completely succeeded. Amal militias and later Hizbollah replaced the exiled PLO forces and continued to threaten Israel with rocket and artillery attacks. Periodic IDF retaliatory operations like Operation "Grapes of Wrath" in 1996 failed to have any permanent deterrent effect and led to strong international disapproval. 55 Hizbollah guerrillas in Southern Lebanon continue to threaten northern Israel today.

The *Intifadas* removed any illusion of security for Israeli civilians living in or near the occupied territories may have had, and Israel's reliance on Palestinian labor made complete exclusion of Palestinians from Israel unlikely. Despite elaborate security precautions, terrorist groups willing to sacrifice their members on suicide attacks began to successfully attack Israeli targets after the Oslo Peace Accords. The physical proximity of Palestinians and Israelis to each other meant that there was little chance for homeland sanctuary even with a political settlement.

Since all of Israel was vulnerable to one or more forms of attack, the lack of homeland sanctuary in Israel is relevant to the U.S. Army COE. The threat of WMD and terrorist attacks was a constant burden on both the nation as a whole and the IDF. The threats were no different from those described in the COE. The similarity of the threat extends even to the types of groups involved, which include both rogue states and transnational Islamic terror groups.

<sup>&</sup>lt;sup>53</sup> Amnon Barzilai, "Israel's Response to the Ballistic Missile Threat", *Military Technology*, 24/3 (March 2000), 32. Also see Van Creveld, *The Sword and the Olive*, 360 and Handel, *The Emerging Strategic Environment*, 48.

<sup>&</sup>lt;sup>54</sup> Valerie Yorke, *Domestic Politics and Regional Security – Jordan, Syria, and Israel* (Brookfield, Vermont: International Institute for Strategic Studies, 1988), 195. Yorke said the Israeli security concerns were only a pretext for military action. Van Creveld (288-291) generally agreed. Schiff (239) and Herzog (340-341) disagreed.

<sup>&</sup>lt;sup>55</sup> Van Creveld, 305.

<sup>&</sup>lt;sup>56</sup> Shmuel Sandler and Hillel Frisch's *Israel, the Palestinians, and the West Bank* (Lexington, Mass: Lexington Books, 1984) detail the economic interdependence of the Israelis and Palestinians. Israeli military

### Limitations on Force Capabilities

The IDF faced limitations on its force capabilities during its operations in Lebanon. The presence of large numbers of civilians in Beirut and other urban areas limited the IDF ability to bring indirect and mechanized firepower to bear.<sup>57</sup> Israel was careful to avoid escalating tactical combat with Syrian units in Lebanon into a general war neither side wanted.<sup>58</sup> Once the IDF defeated Syrian and PLO conventional forces in Lebanon, the nature of the conflict changed and its primary opponents became the militias and irregular guerrilla forces. It was difficult for the IDF to bring effective combat power to bear against the more elusive guerrilla formations, because the IDF was designed to fight a different type of war.

The IDF faced other limitations on its force capabilities as well. Because the IDF was a conscript army drawn from a small population, the extended period of mobilization required in Lebanon and to a lesser extent during the *Intifadas* had a negative economic effect.<sup>59</sup> Political considerations limited the ability of the IDF to conduct operations in Lebanon as popular support dwindled for the invasion. Mr. Sharon's deception about the nature of "Peace for Galilee" was probably due to his realization that Israel's political leadership would limit what he, as Minister of Defense, thought had to be done in Lebanon.<sup>60</sup> Economic and political factors limited force capabilities as much as military considerations.

It was during the *Intifadas* that the limitations on the IDF's force capabilities became most obvious. It was not morally or politically acceptable to simply treat protesters in the streets as if they were true battlefield enemies. The nature of the conflict limited the ability of the IDF to

occupation of the West Bank has had a negative effect on the individual economic lives of Palestinians; approximately 100,000 Palestinians commute to work in Israel according to Hammami and Tamari, 9.

<sup>&</sup>lt;sup>57</sup> Herzog, 346-347. The author stated on numerous occasions that PLO troop dispositions were deliberately chosen to deny the IDF free use of its firepower.

<sup>&</sup>lt;sup>58</sup> Herzog, 346 - 365.

<sup>&</sup>lt;sup>59</sup> Schiff, 261.

<sup>&</sup>lt;sup>60</sup> Herzog, 352; Schiff, 244-246; Van Creveld, 289-291.

utilize the bulk of its mechanized firepower for the conventional combat missions it was designed to execute. Only a small part of the IDF's force structure was relevant to the mission at hand, which was peace enforcement, not conventional war.

The limitations on IDF force capabilities during the past twenty years were unique to the IDF's force structure and strategic situation. Limitations on force capabilities were present in the IDF operational environment, but those limitations were due in large part to Israel's economic and domestic political situation. The IDF and the U.S. Army do not share a similar resource base from which to overcome limitations. The U.S. Army also operates in a different domestic political environment. The IDF's adaptations to its limitations were relevant in the context of Israel's military and political environment, not the U.S. Army COE. The remainder of this monograph does not therefore consider IDF adaptation to the limitations on its force capabilities.

### Complex relationships

The Middle East was and remains an area defined by complex relationships. Strategically, Israel could generally count on U.S. support throughout the period, while before 1990 most of the Arab states depended on the support of the Soviet Union. The degree of support that Israel enjoyed from the United States varied over time. The collapse of the Soviet Union led would-be regional hegemons like Iran, Syria and Iraq to attempt to increase their influence in the Arab world through their policies in Lebanon and their support of the Palestinian *Intifadas*. External powers pursuing their own interests tended to add complexity to the IDF operational environment.

In Lebanon, the IDF fought as part of a coalition with Christian militias against a dizzying array of enemies that included PLO regulars, PLO guerrillas, Syrian Army units, Druze militias,

<sup>62</sup> Efraim Inbar, "Israel's national-security challenges," *International Defense Review*, vol. 27 (July 1994), 26-27

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<sup>&</sup>lt;sup>61</sup> Bernard Lewis, "Did You Say 'American Imperialism'?" *National Review*, 17 December 2001, 30. Lewis' article neatly summarizes how differences in cultural perspective add complexity to the political relationships of the Middle East.

and eventually terrorist groups like Hizbollah. Some or all of these groups fought each other as well as the IDF at any given time, particularly in Beirut and other towns. Syria supported the Islamic militias that supported its own aims, while Israel supported the Christian militias fighting to maintain political power in the face of demographic reality. Shiite militias initially supported Israel as a means for resisting Syria and evicting the PLO, although that support soured quickly over time. Neither Syria nor Jordan was unhappy to see the PLO thrown out of Lebanon, since both saw it as a destabilizing influence in the region. No Arab State supported the PLO with anything except words. Israel never understood the political and economic relationship between Lebanon and the rest of the Arab world or the impact occupying an Arab capital would have. In short, the international, regional, and domestic relationships in Lebanon were Byzantine in their complexity.

Relationships between the entities were as complex during the *Intifadas*. During the first *Intifada*, while the official PLO leadership under Yasser Arafat was in exile, the Unified National Leadership of the Uprising (UNLU) represented most Palestinians in their interaction with Israel. The UNLU did not always act in accordance with PLO wishes.<sup>68</sup> Yasser Arafat essentially hijacked the *Intifada* politically by agreeing to talks with Israel that culminated in the Oslo Peace Accords, which were a means of re-establishing personal control over the Palestinian movement. Groups like Hamas never accepted the legitimacy of the agreement and increased the amount violence after the accords by a factor of ten.<sup>69</sup> Meanwhile, Hizbollah, with the support of Syria and Iran, acted as both an Islamic terrorist group and a political party in Lebanon, blurring the line

<sup>&</sup>lt;sup>63</sup> Van Creveld, 301-302.

<sup>&</sup>lt;sup>64</sup> Norton, 107-108

<sup>&</sup>lt;sup>65</sup> Herzog, 355-360, has the clearest and most succinct description of the complex relationships of the entities in Lebanon.

<sup>&</sup>lt;sup>66</sup> Van Creveld, 303.

<sup>&</sup>lt;sup>67</sup> Schiff, 240-242; Van Creveld 294-295.

<sup>&</sup>lt;sup>68</sup> Hammami and Tamari, 5.

<sup>&</sup>lt;sup>69</sup> Handel, 50-51.

between political struggle, religious fundamentalism, and civic mindedness.<sup>70</sup> Hizbollah was itself feuding with the more secular Amal militias in southern Lebanon.<sup>71</sup> The IDF faced the unenviable task of opposing multiple hostile factions in separate but related theaters of operation.

There was no decrease in the complexity of relationships during the second *Intifada*. In addition to the groups already mentioned, the IDF had to deal with a Palestinian Authority that theoretically represented the political and security interests of all Palestinians. Its 40,000-armed security personnel added a dynamic not present during the first *Intifada*. The Palestinian Authority seemed unable to control the extremists in their own midst without forfeiting its credibility and legitimacy as the leader of the Palestinian struggle for a state. Hamas and Al Aqsa extremists, unsatisfied with the existence of Israel and the possibility of concessions by Arafat, have conducted numerous attacks against Israeli targets since 1993. The complexity of the relationships between the various Palestinian factions complicated the Israeli relationship with the PA.

The ability of the IDF to adapt to complex relationships is relevant to the U.S. Army at both the strategic and tactical levels. Complex relationships may have been the defining characteristic of the IDF operational environment across the spectrum of operations. The complex relationships predicted in the U.S. Army COE are similar in both scale and scope. The IDF had to understand the complex relationships within its operational environment before it could hope to adapt successfully.

# Rules of engagement

<sup>&</sup>lt;sup>70</sup> Van Creveld, 303-304

<sup>&</sup>lt;sup>71</sup> Norton, 120.

<sup>&</sup>lt;sup>72</sup> Hammami and Tamari, 10.

Rules of engagement (ROE) were a characteristic of the IDF operational environment. The IDF adhered to a sketchy ROE during the invasion of Lebanon. It sought to avoid unnecessary direct conflict with Syrian Army units whenever possible in its attempt to avoid general war with Syria. In addition, it adapted ROE with regard to how it treated PLO prisoners who fought as part of conventionally organized units in Lebanon. PLO members could not be treated as criminals since they were captured in a foreign country, and Israel refused to recognize them as prisoners of war since they were not members of a recognized state. Israel put uniformed PLO prisoners in detainee camps. The parallel between the IDF experience and the U.S. Army holding Al Qaeda detainees in Guatanomo Bay is obvious.

ROE became an important IDF issue during the *Intifadas*. IDF soldiers needed rules pertaining to the use of force in complex situations involving large numbers of civilians. IDF ROE was often a source of confusion in the first few years, and IDF soldiers struggled to implement the ROE in day-to-day situations. The initiative, aggressiveness, and loose battlefield discipline that worked so well in previous conflicts were no longer appropriate in the context of the *Intifada*. According to Reuven Gal, former IDF psychologist and the director of the Israel Institute for Military Studies, the IDF never wanted to be a "police-type organization", and vague ROE were a symptom. Some commanders and outside commentators felt that ROE made scapegoats of commanders who made judgment calls in tough situations, and some IDF soldiers remained confused about what they could and could not do in certain circumstances.

<sup>&</sup>lt;sup>73</sup> Van Creveld, 295.

<sup>&</sup>lt;sup>74</sup> Ibid., 293.

<sup>&</sup>lt;sup>75</sup> Ibid., 344.

<sup>&</sup>lt;sup>76</sup> David Hoffman, "There's 'No Black and White'; Intifada Reshapes Views of Israeli Soldiers Series: Intifada Series Number: 2/2", *The Washington Post* (Dec. 8, 1992), 4.

<sup>&</sup>lt;sup>77</sup> Ibid. Martin Van Creveld was particularly outspoken about the negative impact the IDF's ROE (and lack thereof) had on the IDF during the first Intifada, particularly when it was enforced ex post facto. See *The Sword and the Olive*, 346-350.

How the IDF specifically adapted its ROE over time is not particularly relevant to the U.S. Army for several reasons. The U.S. Army has its own method for adapting ROE to specific operations, which has been generally successful during recent operations. The U.S. Army is arguably a better-disciplined, more professional organization than the IDF of the 1980s and early 1990s because it does not depend on conscript soldiers with short periods of training. Finally, the stakes of the conflict between the Israelis and the Arabs are higher than most of those postulated in the COE for U.S. Army forces. The circumstances associated with the formulation of IDF ROE were unique, and IDF adaptation to the presence of ROE provided little in the way of suitable lessons for the U.S. Army.

#### Media

The media was a ubiquitous part of the IDF operational environment, and was inextricably intertwined with the information operations conducted by both Israel and its opponents.

International media helped shape world opinion about the almost universally condemned Lebanon Invasion, particularly after they broadcast the images of the refugee camp massacres. Media reporting about IDF operations in Lebanon was overwhelmingly unfavorable and riddled with factual errors that made IDF actions look disproportionate, immoral, or illegal. The media thus enabled PLO information operations. Israeli media shaped domestic public opinion by reporting inconsistencies between IDF action and government statements. Media action also tended to broaden the scope of conflict informing people whom otherwise would have had little exposure to it.

<sup>78</sup> O'Brien, 190.

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The international media became a conduit for information operations. Beginning in the 1990s, the Arab public in the Middle East followed the Palestinian *Intifada* by watching the Arab satellite television channels like Al-Jazeera in Qatar, LBC in Beirut, MBC in London, and ANN in Spain. Palestinian interests became Arab interests. All Israelis and Arabs with cable television had access to Western media such as CNN and BBC, and thus were aware of how they themselves were being perceived. Media news footage magnified the asymmetric nature of the *Intifada* with its news footage of children and teenager throwing rocks and the IDF responding with riot control agents and gunfire. It was clear to the world which side was the underdog in the conflict. International audiences often viewed events differently than domestic ones. When the IDF changed its riot control tactics to less lethal methods, it learned that "beaten Palestinians were even hotter news than dead ones." St

The IDF experience with the media was similar to what is expected for the U.S. Army in the COE. The globalization of media via satellite television increased the size of the audience potentially hostile to IDF operations, and it was typical for Israel to have little international support for its military actions as a result. Public perception can influence complex relationships, and negative perceptions can influence relationships negatively. The ability of the U.S. Army to adapt to the globalization of the media is critical, and the IDF experience in that regard is relevant.

#### Constrained resources

The IDF conducted operations with constrained resources, and constrained resources dictated how the IDF adapted to its operational environment. Israel was and remains a small state dependent on the generosity of the United States for diplomatic, economic, and military support.

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<sup>&</sup>lt;sup>79</sup> Hammami and Tamari, 11-12.

<sup>&</sup>lt;sup>80</sup> Ilene Prusher, , "Palestinians Talk of a New Intifadah[sic]", *Christian Science Monitor*, 88/185 (19 August 1996), 3.

Resource constraints made Israel vulnerable to pressure from outside powers, particularly the United States. It has a small population from which to draw soldiers, and could not accept heavy casualties because of its relatively limited manpower base. Since most IDF soldiers were reservists, mobilizing large numbers of soldiers had a negative impact the defense budget. The IDF did not have the resources to create a separate force to handle the *Intifadas* while maintaining the forces to conduct conventional war. The entire institution needed to adapt to its operational environment despite resource constraints.

Constrained natural resources affected the IDF operational environment as well. Who controlled access to the scarce water resources of the region was an ongoing source of political friction among all the countries of the region. Northern Galilee, easily threatened by enemies in Lebanon or the Golan Heights, supplied thirty percent of Israel's water and contained a large percentage of its agricultural resources as well. Water was also a source of friction between Israel and the Palestinians in the occupied areas, since the economic viability of an independent Palestinian state demanded domestic water access. Since the U.S. Army expects to operate in a variety of areas, however, natural resource constraints were not as important to this study as the organizational constraints faced by the IDF.

Because the U.S. Army can expect to operate in the COE with its existing force structure, the manner in which the IDF to adapt to its resource constraints in a changing operational environment is relevant. The U.S. Army operates with constrained resources given its force structure relative to the scope of its worldwide commitments. The IDF faced the same dilemma during this period. Changing the entire U.S. Army force structure at once to match a perceived

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<sup>&</sup>lt;sup>81</sup> Efram Inbar, "Israel's Small War: The Military Response to the Intifada," *Armed Forces and Society*, 18/1 (Fall 1991), 34.

<sup>&</sup>lt;sup>82</sup> Inbar, "Israel's national security challenges," 27.

<sup>83</sup> Ibid., 40.

<sup>&</sup>lt;sup>84</sup> Handel, 43-45.

change in the operational environment is not a viable option. Finding better ways to use existing resources is politically more feasible and acceptable than asking for a bigger budget.

### **Ambiguity**

Ambiguity manifested itself in the IDF operational environment in a variety of ways. Hizbollah attacks against IDF forces in Lebanon during its seventeen-year occupation generally stayed below the threshold of violence necessary to prompt a large-scale IDF response. The ambient level of violence in Israel during the first *Intifada* was low enough for the same to remain true. Between 1993 and 2000, the IDF only conducted a few large-scale operations, despite increasing numbers of attacks against Israeli soldiers and civilians. 86 Despite periodic armed attacks against both the IDF and Israeli citizens, IDF responses tended to be limited. The IDF's limited responses may have been driven by a lack of easily identified enemies to attack.

Ambiguity seemed to decrease during the second *Intifada* when the stakes became high enough; i.e., Israel felt threatened as a state, for the IDF to conduct combat operations against the Palestinians. Even so, the level of ambiguity remained high, particularly at the lowest tactical levels. It was and remains difficult to determine at the small unit level who was a threat and who was not. At the highest levels, doubt surfaced about whether Arafat actually could control extremist groups like Hamas, and the question about who to deal with if not him remained unanswered. 87 While most Israelis consider Arafat a terrorist, there seemed to be no palatable alternative between dealing with him and general war.

The ambiguity that the IDF faced in its operational environment was no different from the ambiguity in the COE. Long periods of sustained low levels of violence were a part of the IDF

<sup>&</sup>lt;sup>85</sup> James Wyllie, "Israeli Security – Current and Future Threats," *Jane's Intelligence Review*, 5/12 (December 1993), 564.

<sup>&</sup>lt;sup>86</sup> Handel.. 51.

experience in both Lebanon and the *Intifadas*. The U.S. Army could easily face ambiguous political and tactical situations simultaneously, as the IDF did during the second *Intifada*. Some U.S. Army units may be doing so now in Afghanistan. An examination of the IDF adaptation to the ambiguity of its operational environment is thus relevant to the U.S. Army.

### Rapidity

Rapidity has been a characteristic of IDF operations since 1948. Because of the proximity of Israel to her enemies and the small size of her territory, time has always been a critical factor in IDF operations. The IDF needed to win wars quickly and prevent numerically superior enemies from massing coordinated combat power over a sustained period. One of the many reasons that the Israeli public support of operations in Lebanon declined was that the operation took far longer to conduct than those to which they had become accustomed. Rapid conventional operations played to IDF strengths. Changes in tactics and communications technology enabled IDF opponents to adjust the tempo of their own operations and negate some of the IDF's historical advantages, however.

The Palestinians and Hizbollah increased the rapidity of their own operations, increasing the burden on the IDF to stay ahead. Both Palestinian *Intifadas* coincided with global and regional trends toward communications interconnectivity, which provided non-stop media coverage to every newsworthy event. Terrorist groups like Hizbollah and Hamas generally attacked targets when they were deemed most vulnerable, which meant that there was no longer any 'down' time for the IDF. Preventing terrorist attacks required that the IDF act quickly in response to intelligence, which became more perishable as the enemy became more elusive. Since the IDF often found itself retaliating against Palestinian or Hizbollah groups for successful attacks against

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<sup>87</sup> Wyllie, 563; see also "Arafat's choice," *The Economist*, 361/8252 (December 15, 2001), 39-40.

Israeli targets, it was under pressure to strike both quickly and accurately for political reasons.

Actionable intelligence became more critical than ever before.

Although the Israeli situation was in many ways unique, rapidity was just as much part of the IDF operational environment as it is in the U.S. Army COE. The IDF was forced to adapt to the increased pace of enemy operations by increasing the pace of its own operations. The U.S. Army expects to face the same dynamic. How the IDF adapted to the rapidity of its enemies is therefore relevant to the U.S. Army.

### Asymmetry

The war in Lebanon demonstrated numerous forms of asymmetry, and the asymmetry was pronounced. The IDF pursued limited strategic and operational aims, while the PLO and Lebanese militias fought a total war to defend their homes and families. The organizational asymmetry between the two sides was obvious. The armored and mechanized IDF crushed its conventionally organized PLO opponent during the first few days of conflict, but found it all but impossible to decisively defeat irregular groups fighting as light infantry in the complex and urban Lebanese terrain. 88

Once the IDF began conducting static operations in southern Lebanon, Hizbollah and Amal militiamen used a variety of asymmetric means to inflict attrition. Mortar and rocket attacks, ambushes, and remote detonated mines were the normal means of guerrilla attack. Guerrillas used crude timers to fire their rockets and avoid counter-battery fire, and they used plastic 'rocks' to conceal their roadside bombs.<sup>89</sup> They also used anti-tank missiles to target IDF bunker

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<sup>88</sup> Shiff, 253 and Van Creveld, 296.

<sup>&</sup>lt;sup>89</sup> Hockstader, 2.

apertures with a limited degree of success.<sup>90</sup> The IDF could never be confident that its countermeasures were effective for long, since the enemy adapted quickly to new IDF tactics.

The Palestinians exploited the gross mismatch in capabilities between Palestinian civilians and the IDF during first Palestinian *Intifada*. The Palestinians wanted to end what they saw as a colonial occupation of their territory and specifically avoided challenging Israel's right to exist. The IDF faced large numbers of civilians protesting in the streets of West Bank and Gaza towns, Jerusalem, and border crossing points. Children and young men threw stones at soldiers and destroyed property, and the IDF responded with riot control agents, rubber bullets, and clubs. The media portrayed unequal nature of the conflict on television and in the newspapers, and Israel sought a way to end the conflict. Eventually, Israel was willing to negotiate an end to the uprising because it lacked the will to fight a 'colonial' war indefinitely. <sup>91</sup>

The *Intifada* that began in 2000 and continues to this day was different in context and execution from the first one, and the nature of the asymmetry was different. Groups dedicated to the destruction of Israel, like Hamas, have routinely conducted suicide-bombing missions against relatively undefended civilian targets. Palestinian snipers targeted Israeli settlers in the West Bank and Gaza, and some members of the Palestinian armed forces have conducted mortar attacks against Israeli settlements. The IDF responded with tanks and bulldozers to clear Palestinian settlements, and there was little the Palestinians could do but conduct more sniper, mortar, and suicide bomber attacks. There was, and is, a certain vicious circle of asymmetry on both sides. <sup>92</sup> Each side sought to find new ways to achieve some sort of advantage against the other.

The gross asymmetry between the modern, heavily equipped IDF and its lighter, more agile enemies was exactly the type of asymmetry predicted for the U.S. Army in its COE. IDF

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<sup>90</sup> Kifner, 4.

operations in Lebanon and during the *Intifadas* differed only in their level of violence. The level of asymmetry between the opposing sides was similar in all three cases. The U.S. Army's conventional superiority against future opponents is as pronounced as the IDF's was against the Palestinians and Hizbollah, at least in the near term. Examining how the IDF adapted to the asymmetry in its operational environment is thus relevant to the U.S. Army.

#### Force Protection

The IDF was no different from any other Western army over the past twenty years with regard to how it viewed force protection. As previously stated, Israel was a small country with limited military resources and a large number of potential enemies. The IDF could not afford heavy military losses from either a military or political standpoint during the operations in Lebanon or during the *Intifadas*. The IDF was reluctant to clear the PLO out of West Beirut in 1983 because it feared the associated heavy casualties. Moderate casualties during Operation "Peace for Galilee" eroded public support for the war. Failed operations that led to casualties, like the special forces raid in Lebanon in 1997, caused widespread criticism. Accidents, like the collision of two CH53 helicopters that killed seventy-seven soldiers in 1996, caused the public to question military and government policy.

The IDF approach to daily force protection in hostile operational environments is quite relevant to the U.S. Army, since both organizations share a similar attitude about the lives of their soldiers. The IDF was forced to defend the loss of its soldiers whether those losses were in

<sup>&</sup>lt;sup>91</sup> Hammami and Tamari, 5.

<sup>92</sup> The Economist, 358/8205 (January 20, 2001), 40.

<sup>&</sup>lt;sup>93</sup> Schiff, 256.

<sup>&</sup>lt;sup>94</sup> Ibid 261

<sup>&</sup>lt;sup>95</sup> Scott Peterson, "In a War It Cannot Win, Israel Tries New Tactics", *The Christian Science Monitor International*, http://www.csmonitor.com/durable/1997/10/09/intl/intl.4.html (October 4, 1997), 4. Visited 11/06/01.

combat or due to accidents, and it went to great lengths to prevent such losses. The specific ways in which the IDF adapted are also relevant, since the IDF operated in complex and urban terrain using heavy forces. According to the COE, U.S. heavy units can expect to do the same.

# **Summary**

This chapter showed that all fourteen characteristics of the U.S. Army Contemporary

Operational Environment were present in the IDF operational environment to some degree. Of
those fourteen characteristics, nine were important or relevant enough to warrant inclusion for
further evaluation in the next chapter. Since all the characteristics were present to some degree,
and almost seventy percent of them warrant further consideration, a comparison between the two
operational environments is valid.

The five characteristics not retained (space operations, force projection, limitations on force capabilities, rules of engagement, and media) fell out for a variety of reasons. The IDF benefited from Israeli space operations, but the IDF's experience with space operations was late and extremely limited in comparison to that of the U.S. Army. It was unlikely that the IDF could provide lessons to the U.S. Army about incorporating space operations. The IDF conducted power projection operations, but those operations were different from the type the U.S. Army could expect to conduct unless the United States attacked Mexico or Canada. The IDF adopted ROE as a means of coping with the complexity and ambiguity of both Lebanon and the *Intifadas*. U.S. Army ROE vary from operation to operation, are based on U.S. law, and are unique to the U.S. Army. Israel's peculiar geopolitical situation and the nature of the conscript IDF makes it difficult to assess the IDF's ROE experience for adaptations suitable to the U.S. Army's future operations.

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<sup>&</sup>lt;sup>96</sup> Laura Zittrain Eisenberg, "Israel's Lebanon Policy," Middle East Review of International Affairs, 1/3

Two other characteristics fell out because they were redundant or unsuitable because of intrinsic differences between the IDF and the U.S. Army. Media was a characteristic of the IDF operational environment, but considering it separately from information operations was not necessary. IDF adaptation to the increasing role of the media was part of how it conducted information operations and information warfare. Limitations on force capability are generally a function of national political considerations, force structure, budget, or a combination of all three.<sup>97</sup> The ways in which the IDF adapted to its unique limitations were not particularly suitable for deriving lessons for the U.S. Army. The remaining nine characteristics of the COE retained enough relevance to be included in the next chapter.

Some of the enemies the IDF faced during the past twenty years were mirror images of enemies the U.S. is fighting today or may fight tomorrow. Because the IDF of 1982 and the U.S. Army of 2002 were equipped to fight similar types of enemies, the way in which the IDF adapted to its changing operational environment is relevant to the U.S. Army as it undergoes adapts to its COE. Examining those adaptations and their relevance to the U.S. Army should present some pertinent lessons for the U.S. Army during Transformation. Chapter Four examines the ways the IDF adapted to the nine characteristics that retained their relevance, and analyzes whether or not the IDF was successful doing so.

<sup>(</sup>September 1997), 1.

<sup>97 &</sup>quot;Capturing the Operational Environment", 13.

### CHAPTER FOUR

# **IDF Adaptation**

"The practical measures that we take are always based on the assumption that our enemies are not unintelligent. And it is right and proper for us to put our hopes in the reliability of our own precautions rather than in the possibility of our opponents making mistakes." Archidamus, King of Sparta<sup>98</sup>

Because Israel did not solve the fundamental political problems it had with its neighbors, the IDF was only partially successful adapting to its operational environment. The IDF was more successful adapting to the tactical aspects of its operational environment than it was the strategic ones. The IDF's operational environment was too complex for purely military solutions to be effective. With the exception of Egypt (1979) and Jordan (1994), Israel failed to achieve any lasting political success based upon its battlefield successes. Overwhelming military success in the past may have led to a refusal to look at other ways to solve future problems with its neighbors.

The IDF successfully adapted to seven of the nine characteristics relevant to the U.S. Army COE. Since the COE contains fourteen characteristics of military operations, the IDF's fifty-percent success rate in adapting to those characteristics would seem to hold some implications for the U.S. Army. The next chapter examines those implications. Successful IDF adaptation was not a source of decisive military success, however, because most of the successes were tactical. At the tactical level, the IDF's enemies adapted and innovated as quickly as it did. Complete failure to adapt could have resulted in a series of catastrophic military failures, while complete

<sup>100</sup> Brian Bond, *The Pursuit of Victory* (New York: Oxford University Press, 1996), 185-186.

<sup>&</sup>lt;sup>98</sup> Thucydides, *History of the Peloponnesian War* (London: Penguin Books, 1972), 85.

<sup>99</sup> Robert Satloff, "The Path to Peace", Foreign Policy, No.100 (Fall 1995), 112.

success might have ended each of the conflicts in the IDF's favor. Neither extreme scenario occurred.

In the tactical and organizational sense the IDF adapted well enough to hold its own on the battlefield, but there was one significant indicator that it could have done better. The IDF failed to intellectually examine the changing nature of its operational environment in its professional journals. According to Van Creveld, there was not a single article in the IDF's flagship professional journal pertaining to the *Intifada* between 1988 and 1995. This refusal to deal with reality was shocking in light of the history of Israel's founding, which was essentially the history of a guerrilla movement.<sup>101</sup>

This chapter describes IDF adaptations to both the trends and nine characteristics of the COE. The trends once again provide general logical context for the more specific characteristics. This framework provided the flexibility necessary to address issues pertinent at the strategic and tactical levels while maintaining congruence with the previous two chapters. IDF successes and failures have broadly applicable implications for the U.S. Army as it adapts to its COE because of the similarities of the two operational environments.

# **IDF Adaptation to the Trends in its Operational Environment**

The IDF discovered in Lebanon that the enemy adapted as the IDF innovated, and time was on the enemy's side in a protracted struggle. Hizbollah's ability to adapt to IDF innovations led to stalemate. After seventeen years of using tactical and technical innovation in an attempt to decisively defeat the Hizbollah guerrillas, the IDF was no closer to pacifying Southern Lebanon

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<sup>&</sup>lt;sup>101</sup> Van Creveld, *The Sword and the Olive*, 345.

<sup>102</sup> Kifner, 1-5; Hockstader, 1-3.

than it was in 1982. While outright victory by the IDF was not possible, military defeat at the hands of Hizbollah was improbable. The IDF suffered few tactical defeats, but withdrew once Israeli political will no longer supported the operation and its aim. The cost in treasure and lives levied by Hizbollah was high enough to hurt the credibility of those who thought a purely military solution was possible. That it took so long for the Israeli government to leave Lebanon was probably due in large part to the IDF's strenuous efforts to protect its forces and keep casualties low. Without a political settlement, the best the IDF could accomplish was to maintain the status quo.

The IDF was also unable to end the Palestinian *Intifadas* with military action. Military successes at the tactical level did not translate into victory. The *Intifadas* were motivated in large part by political grievances, while the IDF focused on the security problems they generated. The Israeli government had to solve the political aspects of the problem. The political solution to the first *Intifada* was the Oslo Accords of 1993, which represented an adaptation by the State of Israel to the idea of a future Palestinian State. The Palestinian Authority (PA) and its formally structured paramilitary formations that resulted changed the nature of the IDF operational environment. When disaffected groups like Hamas began attacking Israeli targets again, the IDF conducted security and counter-terrorist operations in Israel and the occupied areas. Those operations should have taken place with the assistance and cooperation of the PA security forces but seldom were for political reasons. While the IDF probably deterred or preempted some terrorist attacks after Oslo, it was not able to break Palestinian resistance in the absence of a political solution.

IDF operations during the second Intifada have been primarily counter-terrorist activities, which the IDF divided doctrinally into Operative Measures, Defensive Operations, and Punitive

<sup>&</sup>lt;sup>103</sup> Van Creveld, *The Sword and the Olive*, 305-306.

Measures. Operative Measures were those initiated by the army and security forces against terrorist targets, while Defensive Operations were the security measures taken to block terrorist action and disrupt planned terrorist attacks. Punitive Measures were the retaliatory actions taken against terrorists, their planners, and their supporters. <sup>105</sup> IDF attacks against PA police stations and the demolition of suspected terrorist members' homes were examples of operative and punitive measures.

The effectiveness of IDF operations from a strategic standpoint remains debatable, since even successful military operations probably radicalized a greater part of the Palestinian population.

The IDF dilemma was balancing tactical success against long-term strategic effects. The IDF has had the military capability to end the *Intifadas* in an absolute sense if the Israeli government decided to forego compliance with the Laws of War, ignore world opinion, and treat protesters as if they were purely military enemies. It did not. That the IDF did not take extreme measures indicates at least some appreciation for political-strategic consequences.

#### **IDF** Adaptation to the Characteristics of Military Operations

### Operations on complex/urban terrain

The IDF's ability to utilize all of its weapons systems to their best effect was limited by terrain. The IDF was a mechanized army and was not created for operations in complex and urban terrain. It had to adapt in the midst of operations. In Lebanon, the IDF sought to increase the survivability of its forces through the creation of armored vehicles designed to minimize the

<sup>104</sup> Bernard Reich, ed., *Arab-Israeli Conflict and Conciliation – A Documentary History* (Westport, Conn.: Praeger, 1995), 231-233.

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<sup>&</sup>lt;sup>105</sup> "Israeli Counter-Terrorist Activity," at http://www.ict.org.il/counter\_ter/Is\_ct.htm, accessed 11/23/01, 1.

likelihood of casualties associated with ambushes in both complex and urban terrain. Southern Lebanon became the laboratory for developing and testing IDF ideas about the use of armored and mechanized forces against an elusive enemy in complex and urban terrain. <sup>107</sup>

The IDF adapted to operations in complex and urban terrain by stressing precision weapons that targeted specific individuals and infrastructure. Because of the urban nature of the *Intifadas* and the desire to avoid unnecessary civilian casualties, the IDF increasingly depended on the use of laser guided missiles and bombs, wire guided anti-tank missiles, and snipers. Tanks, with their sophisticated fire control systems and thermal imaging, were particularly useful for locating Hizbollah ambushes and infiltration routes in Lebanon. When the guerrillas avoided direct contact with IDF tanks, the IDF then used tanks to canalize Hizbollah infiltration routes into more predictable areas. <sup>108</sup> Tanks gave the IDF survivable, sustainable precision fires in both urban and complex terrain. During the ongoing *Intifada*, the IDF used tanks in conjunction with snipers to locate and kill Palestinian gunmen who operated in and among large crowds of unarmed civilians. <sup>109</sup> The use of precision weapons enabled the IDF to successfully kill its enemies without causing excessive civilian casualties or collateral damage.

The IDF came to depend more on attack helicopters than fast moving IAF jets because of their greater utility and precision in complex and urban terrain. It doubled its total number of attack helicopters between 1982 and 1990. During the current *Intifada*, the IDF used the antitank missiles on its AH64 Apache helicopters as precision weapons to assassinate Palestinian leaders suspected or implicated in terrorist acts, with some degree of success. These strikes

<sup>&</sup>lt;sup>106</sup> Martin Van Creveld, *The Transformation of War* (New York: The Free Press, 1991), 73. Van Creveld makes the point that all armies have faced limitations on what they could and should do.

<sup>&</sup>lt;sup>107</sup> Kanter, 9-11; Eshel, 26-29.

<sup>&</sup>lt;sup>108</sup> Kanter, 9-10.

<sup>&</sup>lt;sup>109</sup> Arieh O'Sullivan, "The Army Banks on Its Tanks." *The Jerusalem Post*, 15 august 2001, reprinted with permission in *Armor*, CX/6 (Nov-Dec 2001), 13.

required precise real-time intelligence to ensure that the individuals were in their offices at the time, and there was some collateral damage. The damage was far less than if the entire building had been bombed. The IDF successfully used attack helicopters to destroy point targets such as PA police stations and government offices as well. 111

The IDF also developed special operations force (SOF) capability to bring the fight to the Hizbollah and other terrorist groups on their own terms. However, because the operational environment was so hostile, the special operations forces were forced to conduct short duration raids and ambushes. Sustained operations outside of IDF controlled areas in Southern Lebanon were not possible, and overall success was disappointing. 112 IDF SOF enjoyed more success during the Intifadas, and was able to eliminate several of the Palestinian "intifada gangs" in the occupied territories. 113 The operational environment was permissive enough to allow raids without the threat of high casualties. The IDF's use of SOF was effective when it used them within the limits of their capabilities.

The IDF was tactically successful adapting to complex and urban terrain by finding new ways to use its existing weapons systems. Tanks and attack helicopters proved capable of providing both target acquisition and precision fires. Snipers killed or wounded selected individuals in large crowds of civilians.<sup>114</sup> Combat engineers cut down groves of trees and flattened acres of land along roads in the occupied areas to reduce the threat of ambush. They also flattened buildings in retaliation for Palestinian sniper and mortar attacks, removing both cover and concealment. 115

<sup>&</sup>lt;sup>110</sup> George W. Gawrych, "Attack Helicopter Operations – Attack Helicopters in Lebanon, 1982", in Combined Arms in Battle Since 1939, ed. Roger J. Spiller (Ft. Leavenworth, Kan., U.S. Army Command and General Staff College Press, 1992), 35-41.

<sup>111</sup> Gal Luft, "Who is Winning the Intifada?" Commentary, 112/1 (July/August 2001), 4.

<sup>112</sup> Scott Peterson, "In a War It Cannot Win, Israel Tries New Tactics," Christian Science Monitor International, http://www.csmonitor.com/durable/1997/10/09/intl/intl.4.html (October 9, 1997), visited 11/06/01.

<sup>&</sup>lt;sup>113</sup> Inbar, "Israel's Small War: The Military Response to the *Intifada*," 42.

<sup>114</sup> Ibid.

<sup>&</sup>lt;sup>115</sup> Luft, 8.

These actions had a positive tactical effect, but potentially had negative strategic consequences because they tended to inflame Palestinian and world opinion.

In general, IDF adaptation to complex and urban terrain was tactically successful and strategically unsuccessful. Strategically, there seemed to be no decrease in the number of Palestinians or Hizbollah guerrillas willing to challenge the IDF. The deterrent effect of IDF adaptation was limited to forcing the enemy to change its tactics, not end its attacks. Tactically, SOF units proved effective when the environment was not so hostile as to preclude independent operations. Heavy forces demonstrated the staying power and survivability necessary to conduct operations in complex and urban terrain. The end result was mixed. While the IDF won most of its battles, the wars never seemed closer to ending.

### Information warfare and information operations

The IDF discovered that with regard to information operations it is always 'in contact', and became more sophisticated about information operations over time. In Lebanon and during the current *Intifada*, the IDF has usually given advanced warning to the Palestinians when it targeted buildings for destruction with its attack helicopters and tanks so that they could be evacuated. It was silent about targeting selected persons in crowds of demonstrators with snipers. Such policies sent clear messages to the other side. Since most military action sends the opponent some message, the IDF's announced policy of hunting down suspected Hamas and Hizbollah terrorists could be classified as IO, particularly since it posted its policy on a website. The IDF officially claimed credit for most of its killings, although it generally portrayed them in the most favorable

<sup>&</sup>lt;sup>116</sup> Hammami and Tamari, 5.

<sup>117</sup> http://www.ict.org.il/counter\_ter/Is\_ct.htm.

possible light.<sup>118</sup> How effective these tactics have been with regard to reducing future terrorist attacks is questionable, since those attacks continued to occur. The unanswerable question is how many attacks would have occurred if the IDF used different methods.

The IDF learned that sensational military tactics became less newsworthy over time, particularly when done for understandable reasons. Repetition desensitized public opinion. The IDF's use of bulldozers and tanks to clear buildings suspected of harboring snipers and mortar positions during the current *Intifada* was barely newsworthy after the first few months. Good intentions may have helped mitigate negative public opinion as well, at least in Israel. IDF bulldozer tactics were an adaptation to the information fiasco that occurred during Operation "Grapes of Wrath" in 1996, when IDF artillery killed more than 100 civilians hiding in a UN shelter. International pressure caused Israel to end the operation in a few days. Since then, the IDF shaped its tactics to avoid another such disaster, and bulldozer tactics were a result. The discovery that repetition eventually denied the enemy some of his IO weapons may have been accidental, but it was effective.

One partially successful adaptation for the IDF was human intelligence (HUMINT) gathered by paid agents. After the IDF forced the PLO into exile in Tunis, Israel used satellite photographs provided by American spy Jonathan Pollard in 1985 to bomb the PLO's headquarters. After the Oslo Accords in 1993, the IDF established a network of collaborators and informants in the West Bank and Gaza, using cash to recruit approximately ten agents per town. This network, in conjunction with the hilltop electronics eavesdropping network it established Israeli settlements in 1996, has given the IDF a good source of hard information about terrorist activity. However,

<sup>&</sup>lt;sup>118</sup> *The Economist*, "Israel and the Palestinians – It can only get worse," 362 / 8257 (26 January 2002), 42; Peterson, 2; Luft, 8.

<sup>&</sup>lt;sup>119</sup> Luft, 33.

<sup>&</sup>lt;sup>120</sup> Ibid., 4.

<sup>&</sup>lt;sup>121</sup> Thomas B. Allen and Norman Polmar, *Merchants of Treason* (New York: Dell Publishing, 1988), 361-362.

<sup>&</sup>lt;sup>122</sup> Matt Rees, "The Enemy Within," *Time*, 158/8 (27 August 2001), 31.

since the Palestinians have been killing suspected collaborators their future usefulness may be limited. HUMINT gave the IDF valuable information and was successful in general, but it came with high casualty toll for the agents themselves.

The IDF shared a part of its ROE with the opposition as a successful means of deterring attacks and reducing civilian casualties. During the current *Intifada*, the IDF made it public knowledge that no one may come within a certain distance of its tanks when they occupy static positions, an edict it intended to enforce with machine gun fire. <sup>124</sup> Television footage confirms that most Palestinians seem to avoid IDF tanks in the street. Selectively sharing information potentially reduced civilian casualties while simultaneously reducing the enemy's ability to exploit IDF violence in its own information operations. It may have also reduced the number of opportunistic attacks, since a simple cost-benefit analysis would deter non-fanatics from taking the chance.

The Israeli Government was a critical source of support for the IDF and helped negate the enemy's use of the media for information operations. It stood fast in the face of criticism and did not allow international media to unduly influence controversial IDF operations. As those operations become more commonplace, the media lost interest in what was no longer 'fresh' news. The government was in turn aided by domestic public support, long conditioned by an Israeli siege mentality. The best examples of such tactics were the IDF bulldozer operations and the use of snipers against select members of hostile crowds. After several months of such tactics, few governments or organizations outside the Arab world paid much attention and neither the IDF nor the government needed to spend much time defending those tactics. While this

<sup>&</sup>lt;sup>123</sup> Clyde Haberman, "Palestinian Fury Rising At Enemy Within", *The New York Times*, 7 August 2001, 1-2.

<sup>&</sup>lt;sup>124</sup> Arieh O'Sullivan, "The Army Banks on Its Tanks," 13.

<sup>&</sup>lt;sup>125</sup> Luft, 33.

<sup>&</sup>lt;sup>126</sup> Tamar Liebes and Shoshana Blum-Kulka, "Managing a moral dilemma: Israeli Soldiers and the Intifada," *Armed Forces and Society*, 21 / 1 (Fall 1994), 56.

strategy was effective, it required a willingness to ride out the initial storm of controversy not necessarily present in the U.S. unless the stakes of conflict were quite high.

The Israeli Government has also used the media as a forum for its information operations in general support of IDF operations. Sympathetic advocacy groups based overseas have used (and continue to use) paid advertising in opinion journals to counter unfavorable media reports. Facts and Logic About the Middle East (FLAME) is an example of an organization that has run sophisticated information ads in various magazines and newspapers for years. Former Israeli Prime Minister Benjamin Netanyahu has regularly articulated plausible defenses for IDF military operations on American political television. While these efforts may have had some positive effects on an American audience generally sympathetic to the Israeli cause, their effect on the rest of the world seems to be extremely limited.

Within its own capabilities, the IDF successfully adapted itself to information operations. It used HUMINT effectively, but lost agents and may have trouble recruiting Palestinian collaborators in the future. The use of tactical information operations to minimize civilian casualties seemed to be effective as well. However, the IDF was not capable of adapting to the hostile information environment, which included the media, without assistance from its government. Adapting to the realities of the world media in the IDF's operational environment was what would be a multi-agency effort in the U.S., and IDF success came only in the context of strong government support.

# No homeland sanctuary available

<sup>&</sup>lt;sup>127</sup> A good example of a FLAME ad can be found on page 23 of the December 17, 2001 *National Review*; the organization almost certainly works at the behest of the Israeli government. The ads are clever renditions of the Israeli point of view with regard to the conflict in the Middle East.

The IDF was more successful adapting to the strategic problems of homeland sanctuary than it was the tactical ones. Lack of homeland security was always a part of the IDF operational environment, and so the measures the IDF took to adapt during the past twenty years were more about adjusting to new technical realities than adapting new tactics. Israel developed the Arrow ballistic missile defense system, with substantial U.S. aid, to decrease the effectiveness of ballistic missile attack by hostile states like Iraq and Iran. It did not wish to depend on the U.S. for ballistic missile defense as it did during the Gulf War. Additionally, Israel refused to sign the Nuclear Non-Proliferation Treaty, since it fully intended to maintain its nuclear arsenal to deter attack from states with ballistic missiles and WMD. Because the stakes were national survival, the Israeli government was immune to international pressure on both issues. A nuclear arsenal also deterred the likelihood of another large-scale war with Egypt, Syria, or Iraq. Since no WMD attacks or conventional war occurred during the period, the strategic adaptations appear successful.

The IDF was partially successful making tactical and organizational changes based on experience gained during the Gulf War and operations in Southern Lebanon. It used a combination of raids, strikes against terrorist leaders, and security measures to prevent attacks, and then used the same methods punitively after an attack. It depended on deterrence to prevent cross border attacks by Hizbollah from Lebanon, which was effective until recently. In 1992, the IDF established the Rear Command to replace the Civil Guard that performed poorly responding to the Gulf War missile attacks. The reorganization provided the IDF with more specialized capabilities and the authority to deal with WMD and civil defense issues it lacked in 1990-1991. The IDF's ability to provide homeland sanctuary at the tactical level was not

<sup>&</sup>lt;sup>128</sup> Amnon Barzilai, "Israel's response to the ballistic missile threat," *Military Technology*, 24/3 (March 2000), 30-35.

<sup>&</sup>lt;sup>129</sup> Duncan, 24; Handel, 48, 53.

<sup>&</sup>lt;sup>130</sup> "Israeli Counter-Terrorist Activity," at http://www.ict.org.il/counter\_ter/Is\_ct.htm, visited 23 November 2001.

<sup>&</sup>lt;sup>131</sup> Cohen, 239.

perfect but may have been the best possible considering the nature of the threats. Suicidal bombers have proved able to penetrate into the homeland regardless of the security countermeasures taken.

The term 'no homeland sanctuary available' proved to be a truism in the IDF operational environment, and IDF adaptation could only mitigate the threat to a limited degree. Improved missile and civil defense measures may have been successful deterrents but were never tested. Stopping suicide attacks completely proved impossible. Deterrence may or may not prevent future Hizbollah attacks. Successful IDF adaptation should be measured by the degree to which future attacks were mitigated, and in that sense the IDF was as successful as it could be.

# Complex relationships

Israel successfully used the political aspect of power to adapt to some of the complex relationships in its strategic environment, and in doing so lessened some of the political and military threats to its existence. It made peace with Jordan and has maintained a dialogue with Syria. It avoided general war with its neighbors for twenty years, the longest such period of relative peace in Israeli history. It also withdrew from Lebanon, with no immediate negative consequences. The IDF was not as successful at the tactical level, however, and its shortcomings had strategic consequences.

The IDF failed to adapt to the complex relationships it encountered in Lebanon. IDF operations clearly failed to appreciate the nature of the complex relationships among the multi-ethnic population there. It established and then supported the Southern Lebanese Army (SLA) for fifteen years as a means to use local nationals (primarily Christians) hostile to the PLO to help

<sup>132</sup> O'Brien, 263; Robert Satloff, "The Path to Peace," Foreign Affairs, 100 (Fall 1995), 109-110.

protect northern Israel.<sup>133</sup> The Shiite majority supported the IDF effort to eject the PLO. However, the IDF alienated the initially supportive Shiite population by creating a Christian-led SLA, ignoring Shiite political and religious sensibilities and acting arrogantly. As a result, it was directly responsible for the creation of the Hizbollah.<sup>134</sup> The Hizbollah proved to be a more difficult military problem than the PLO ever was.

In 2000, Prime Minister Barak decided to accept risk along the Lebanese border and withdraw the IDF, in the hope that future reprisals by the IDF against the Hizbollah would be seen as self-defense. Once the IDF evacuated Lebanon, the SLA dissolved in an attempt to avoid retribution. The SLA's fate could make future allies difficult to recruit. The IDF planned to use the threat of massive retaliation against Hizbollah forces in South Lebanon if they renewed cross-border violence against Israel. Deterrence has kept the border relatively peaceful so far, but the had the IDF acted with tact and care when it invaded Lebanon the problems on the border could have been solved twenty years ago.

The IDF had little success adapting to the complexity of the relationships among its Palestinian adversaries. Retaliation against PA infrastructure in response to terrorist attacks by Hamas or Islamic Jihad seemed ineffective, particularly since the PA may not have been able to control those groups because of the widespread public support they enjoyed. IDF assassination of Hamas leaders failed to end either public support for Hamas or terrorist attacks, and possibly has made the Yasser Arafat's promises to impose order impossible to carry out. To do so could lead to

<sup>&</sup>lt;sup>133</sup> Herzog, 355.

<sup>&</sup>lt;sup>134</sup> Norton, 106-117.

<sup>&</sup>lt;sup>135</sup> Arieh O'Sullivan, "Mofaz adapts IDF to the 'Me Generation," *The Jerusalem Post Internet Edition*, 15 June 2000, http://www.jpost.com/Editions/2000/0509/Features/Features.6430.html, 7, visited 23 November 2001.

<sup>&</sup>lt;sup>136</sup> Lisa Beyer, "Courage under Fire", *Time Europe*, Vol. 155, No. 22 (5 June 2000), http://www.time.com/time/europe/magazine/2000/0605/lebanon.html, accessed 11/06/01, 1-4.

charges of betrayal of the cause and eventual assassination by his own people. Killing Palestinian terrorists did not discredit them in the eyes of their own people.

The IDF dealt poorly with the complex relationships in its operational environment. Early mistakes proved capable of compromising future operations indefinitely. The complex relationships of the IDF operational environment were specific to the various iterations of Arab-Israeli conflict. Because those relationships were unique to IDF operational environment, the

ways in which it attempted to adapt provide few useful lessons for the U.S. Army, except as negative examples.

#### Constrained resources

The IDF successfully adapted to the constrained resources of its operational environment. It did so by modifying its existing force instead of creating an altogether new one. It leveraged new technology to make its equipment more survivable and extending its useful service life. By finding new ways to use existing systems, it conserved national defense resources for future or ongoing operations.

The IDF modified captured vehicles and refitted its own older equipment to get the capabilities it desired. A 'waste not, want not' attitude coupled with inventive solutions to pressing problems such as armored vehicle survivability in Lebanon kept resource constraints from handicapping IDF operations. Modification of obsolete captured and existing IDF vehicle systems like the T55, M60, and Centurion tanks was more economical than purchasing new ones outright. The IDF refitted old tanks as armored personnel carriers (APC), vastly increasing the survivability of its

<sup>&</sup>lt;sup>137</sup> The Economist, "The Palestinians – Arafat's choice," 361/8252 (15 December 2001), 39.

<sup>&</sup>lt;sup>138</sup> Kanter. 10; Eshel, 28-29.

mechanized infantry at a fraction of the cost it would take to design and build a new vehicle. It increased the armor protection of its M60 tanks and M113 APC so that they could be used in Lebanon and the occupied territories without excessive risk despite their obsolescence. All of these measures were relatively successful.

### **Ambiguity**

The increase in violence since the 1993 Oslo Accords reduced ambiguity for the Israeli people and by extension the IDF, because they became more united in the face of attacks that seemingly threatened their national existence. The increase in violence led the public to see complex issues in black and white, which greatly simplified questions about right, wrong, and who the enemy was. A decrease in public ambiguity led to a decrease in military ambiguity. The Oslo Accords had another unintended consequence with regard to ambiguity as well, because they created what the IDF viewed as a legitimate military target in the form of the Palestinian Authority and its security apparatus.

The IDF attempted to decrease ambiguity by treating the PA as a legitimate military target. The Accords made the PA responsible for the collective behavior of the Palestinian people in the occupied territories, instead of the IDF. The IDF now had a tangible Palestinian enemy to target and it attempted to use carrot and stick tactics to maintain order in the West Bank and Gaza. The IDF followed a pattern where it attacked PA government, police, and military infrastructure in retaliation for terror attacks and suicide bombings for a period of days, and then stopped so that the government could conduct talks with the PA. This methodology decreased ambiguity for the IDF, but was based on the simplistic assumption that Arafat be made to control all the

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<sup>&</sup>lt;sup>139</sup> Diehl, 2.

Palestinian factions with enough motivation. Blaming the PA for all terror attacks was not militarily or politically effective because it only assumed away ambiguity. The terror attacks continued and IDF retaliation infuriated the general Palestinian population.

The IDF attempted to increase the level of professionalism of its soldiers under the assumption that better trained soldiers could deal with the psychological and physical challenges of the *Intifadas*. Active duty troops proved to be cheaper to use both financially and politically. It created Arabic speaking Border Guard units and established special undercover units of highly trained conscripts. By reducing its dependence on reservists and increasing the pay and benefits of its long service professionals, the IDF hoped to build a force better capable of handling duty in the West Bank and Gaza than the one it fielded during the first *Intifada*. It is too early to determine how much more effective the IDF has performed during the second *Intifada*.

The IDF generally failed to adapt to the ambiguity of its operational environment. While it improved the quality of its soldiers and units, it never seemed able to effectively separate the true threats from the generally hostile population during the Intifadas. The result was an even more hostile general population and no reduction in the amount of ambiguity. IDF freedom of action seemingly increased with the creation of the Palestinian Authority and the corresponding rise in the ambient level of violence, even though neither of those events was particularly desirable for Israel. Neither the IDF's organizational changes nor the specific changes in its relationship with the Palestinians have significant implications for the U.S. Army.

# Rapidity

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<sup>&</sup>lt;sup>140</sup> Matthew Kalman, "Israel Pulls Back Retaliation To Give Arafat Chance to Act", *USA Today*, 6 December 2001, 6, http://ebird.dtic.mil/Dec2001/e20011206pulls.htm, visited 12/10/01. This is only one example of many where the Israeli government used a 'big stick' strategy to force Arafat to impose order.

<sup>&</sup>lt;sup>141</sup> Stuart A. Cohen, "The Israel Defense Forces (IDF): From a 'people's army' to a 'professional military' – Causes and Implications," *Armed Forces and Society*, 21/2 (Winter 1995), 241-242.

Accustomed to conducting operations rapidly, the IDF adapted to the rapidity of its operational environment quite well from a tactical standpoint. The IDF exploited real time signals intelligence (SIGINT) to track and in some cases, assassinate Palestinian and Hizbollah resistance leaders while they talked on their cellular telephones. The IDF used remote controlled bombs to kill suspected terrorists, which required real time intelligence and the will to act quickly. From a strategic standpoint, these types of attacks had a negative impact on the general population in Lebanon and the occupied areas, because they considered many of the terrorists local or national heroes.

The IDF seemed to miss few opportunities to inflict mayhem upon suspected terrorists for lack of permission to attack them. It had an appreciation for the perishable nature of good intelligence, the fleeting nature of opportunity in the context of their operational environment, and freedom of action. IDF retaliation for attacks by Al Aqsa and Hamas generally occurred within a few days, and in many cases, within a few hours. The IDF's ability to adapt to the rapidity of its operational environment seems to stem from its willingness to act when it has enough information to do so. It was also aided by the physical proximity of its enemies.

While the IDF successfully adapted to the tactical rapidity of its operational environment, it did so at some political and strategic cost. Acting rapidly to kill guerrillas and suspected terrorists expended political capital and required strong government support. The U.S. Army would require similar levels of support to publicly use the same methods as the IDF. To be as effective, it would need to overcome distance factors the IDF did not face.

# Asymmetry

<sup>&</sup>lt;sup>142</sup> Rees, 2.

<sup>&</sup>lt;sup>143</sup> Peterson, 2.

Asymmetry permeated every aspect of the IDF operational environment, and was an underlying characteristic of all IDF adaptations. The IDF demonstrated flexibility in adapting existing capabilities to the realities of its operational environment. While its opponents exploited the bravery and dedication of their human materiel, the IDF was generally successful maximizing the effects of its tactical and technical advantages. The asymmetry between the IDF and its Arab opponents was as pronounced as the asymmetry expected between the U.S. Army and most of its potential opponents. The manner in which the IDF adapted tactically and technically to that asymmetry is thus relevant to the U.S. Army.

The IDF sought to maximize its asymmetric technological advantage by finding tactically effective ways to use existing weapons systems. The IDF used the fire control systems on its tanks as a means to counter Hizbollah infiltration efforts in Southern Lebanon. It used missiles designed for destroying enemy tanks to destroy the specific offices of suspected terrorists and buildings that were symbols of the Palestinian Authority, such as police stations. It intercepted cellular telephone calls to pinpoint terrorist cells. It used combat engineers to demolish the homes of Hamas supporters and suspected terrorists, and it used armored vehicles as mobile checkpoints in the occupied territories. Taken together, these indicate that the IDF successfully adjusted its thinking about how to use its existing capabilities instead of waiting for new types of weapons.

#### Force protection

A major part of IDF thinking about force protection centered on the design of its vehicles, because it was historically an armored and mechanized force. The IDF considered protection the most important aspect of armored vehicle design since at least the 1973 War. Because the majority of IDF casualties after 1984 occurred during Hizbollah ambushes in the complex terrain

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 $<sup>^{144}</sup>$  Van Creveld, The Sword and the Olive, 275-276.

of South Lebanon, it tended to adapt its vehicles to that specific environment. Those adaptations paid off later, in the less lethal environment of the *Intifadas*.

The static nature of the operations in Lebanon forced the IDF to protect the logistical assets it pushed to its forward-deployed soldiers each day. Keeping the routes permanently open proved impossible against the Hizbollah guerrillas, so the IDF had to open them almost every time it used them. It used armored combat vehicles to escort the convoys and tanks to overwatch their movement. It was generally successful, but lost both soldiers and vehicles doing so. The IDF limited its losses in Lebanon by increasing the protection of it's armored vehicles and varying the times and routes they used as much as possible. Although there were losses, the IDF kept them to a sustainable minimum, as evidenced by the length of time it spent in Lebanon.

The IDF began to stress survivability above all other traits while designing new vehicles like the Merkava and successfully modifying existing designs such as the M60, the M113, and the Centurion. Because of the small geographical environment in which the IDF was called to operate, it did not need to make its tanks and armored personnel carriers small or light enough to be deployed by air. All its vehicles could be moved into their theater of operation by truck or under their own power. The trend in armored personnel carriers (APCs) was towards super heavy models, many based on obsolete tank chassis and hulls, which were far more survivable against the rocket propelled grenades (RPG) and mines encountered in the complex terrain of Southern Lebanon. The IDF also increased the number of machine guns on its APCs to help break up coordinated attacks by RPG teams in urban terrain. All of these adaptations were successful in minimizing IDF casualties.

<sup>&</sup>lt;sup>145</sup> Eshel, 26.

<sup>&</sup>lt;sup>146</sup> Ira L. Partridge, "Modifying the Abrams Tank for Fighting in Urban Areas." *Armor*, CX/6 (Nov-Dec 2001), 23. Also see Noah Kanter, "Employing Armor in Low Intensity Conflicts: Some Lessons for the U.S. Armor Force," *Armor*, CXI/1 (Jan-Feb 2002), 10-11. Eshel stresses the same themes in his article.

<sup>147</sup> Stanley C. Crist, "Improving LAV Survivability." Armor, CX/6 (Nov-Dec 2001), 16.

Vehicles modified to survive the ruthless fight with the very clever Hizbollah in Lebanon turned out to be relatively well suited for the operations in urban terrain required during the *Intifadas*. The IDF, organized for mechanized combat, could not be reorganized into something different without creating new vulnerabilities with regard to its Syrian and Egyptian neighbors. It needed a way to use what it had effectively or risk becoming irrelevant during the confrontations with the Palestinians.

By making its vehicles more survivable in Lebanon, the IDF also made them more survivable in the urban areas where they often operated in static positions during the *Intifadas*. Until February 2002, no IDF tank had ever been destroyed by either the Palestinians or the Hizbollah, despite literally hundreds of attempts since the 1980s. The result of that attack and another against soldiers manning a checkpoint caused the IDF to reconsider the static checkpoints it used in the occupied areas. The IDF has decided to try positioning its forces away from Palestinian population centers and use mobile checkpoints to conduct "surprise checks." The effectiveness of the new tactics remains to be determined because the aim of the checkpoints was to control the Palestinian population.

# Summary

This chapter showed that the IDF successfully adapted to seven of the nine characteristics examined. It failed to adapt to the complex relationships and ambiguity of its operational environment. The IDF failed to adapt successfully to the complex relationships it found in Lebanon, and its actions during the *Intifadas* indicated a simplistic approach to dealing with complex relationships among the various Palestinian factions. The effectiveness of the current

<sup>&</sup>lt;sup>148</sup> Middle East Newsline, "In first, Palestinians destroy Israeli tank", *World Tribune.com*, Tel Aviv, 15 February 2002, http://216.26.163.62/2002/me\_palestinians\_02\_15.html, visited 2/15/02.

<sup>&</sup>lt;sup>149</sup> MSNBC Staff and Wire Reports, "16 Palestinians die in Israeli strikes," 20 February 2002, http://www

IDF of holding the PA responsible for the actions of all Palestinian factions is questionable, and may be a sign of frustration. Complex relationships can contribute to the ambiguity found during operations, which was the other characteristic to which the IDF failed to adapt very well.

The IDF dealt with ambiguity in primarily two ways, neither of which provided useful lessons for the U.S. Army. The first was to develop ROE to provide soldiers guidance for their behavior, which were unique to the IDF. The other way was to increase the professionalism of its force, which still depends on conscripts for the majority of its manpower. The U.S. Army has used ROE for years and has been a professional force for more than twenty years. Neither approach seems to have implications for the U.S. Army.

The IDF had little success adapting strategically to its operational environment. It achieved a measure of homeland sanctuary by improving its missile and civic defenses, but failed to stop many suicide bombings. Its IO efforts had little strategic effect, and because it depended on the Israeli government at the strategic level. The IDF's failure to recognize the complexity of relationships in Lebanon led directly to the creation of the Hizbollah, which was a strategic disaster. Increasing the rapidity of its military operations to keep up with the enemy seemed to have little sustained deterrent effect on either Hizbollah or the Palestinians. Finding new ways to use constrained resources reduced the burden of military spending on the government. Force protection adaptation had the greatest positive strategic effect, since it enabled the government to conduct sustained operations in Lebanon for eighteen years. Force protection improvements also enabled the IDF to operate in complex and urban terrain, which gave the Israeli government more strategic options than it would have had otherwise. Since Israel was generally on the strategic defensive in a difficult political situation, the IDF's seemed to have limited options for adaptation at the strategic level.

MSNBC News, msnbc.com/news/677951.asp?pne-msn, 2, visited 20 February 2002.

The IDF had more tactical success adapting to its operational environment. By improving its tactics and the survivability of its combat vehicles, the IDF proved capable of operating in complex and urban terrain with its existing weapons systems and organizations. The IDF generally exploited the asymmetry with its opponents to advantage, although there were negative implications in the information battle. Media images of the heavily equipped IDF facing Palestinian civilians led much of the international audience to sympathize with the underdog. However, tactical information operations provided the intelligence necessary to target the enemy with rapidity and precision. The IDF was incapable of stopping suicide bombers with tactical measures. Regardless of how well the IDF adapted tactically, it was still incapable of defeating either the Hizbollah or the Palestinians.

Having found some successful solutions to half of the characteristics of COE makes the IDF worthy of study, but not necessarily emulation. The adaptation of the IDF over the past twenty years is relevant because of the similarity between its operational environment and the COE, not because the two environments were identical. Successful IDF adaptation to seven of the nine most relevant characteristics of the COE has some implications for the U.S. Army and it is possible to make recommendations based upon those implications. The next chapter describes some implications of the IDF experience and some pertinent recommendations for the U.S. Army based on that experience.

### **CHAPTER FIVE**

# Implications and Recommendations for the U.S. Army

"What is particularly dangerous about the technocratic-mechanistic view of the world ... is that it is disconnected from the real world. It is particularly dangerous because Americans have a long track record of overestimating their technological superiority and underestimating the ability of their opponents to figure out methods to short-circuit our many advantages." Williamson Murray 150

#### General

The IDF faced dilemmas created by a full spectrum of threats that ranged from civil disturbances to the use of weapons of mass destruction (WMD). Some of those threats, embodied in the Palestinian Intifadas and Hizbollah operations in Lebanon, were not predictable in 1981. The IDF needed the flexibility to adapt to those threats as they manifested themselves over the years, and was generally successful at the organizational and tactical levels. The IDF, like the U.S. Army, does not set national policy and therefore does not control whom or when it fights. The implication is that there are unknown threats in the world, and that the U.S. Army's ability to adapt to those threats is more important than its ability to predict what or where those threats will be. If public policy makes it difficult to plan and execute good strategy, the U.S. Army can expect to execute bad strategy with the tools at hand. U.S. Army doctrine should be written with the assumption that today's Army with its current capabilities is what will fight the next war.

The fundamental difference between the two operational environments is the requirement for the U.S. Army to conduct power projection operations. While a critical distinction, the difference does not invalidate either the comparison or the utility of the IDF experience. The IDF was only partially successful adapting to its operational environment despite not having to conduct power projection operations. The implication is that the U.S. Army faces a much more difficult challenge adapting to its operational environment than the IDF did. The U.S. Army should study the IDF experience all the more closely because it could be used as a control group for designing the interim force.

The IDF did not search for a magic weapons system to solve its military dilemmas. In 1982, the IDF was a mechanized army organized to fight conventional war against similarly equipped opponents. Despite the technological advances and two *Intifadas* since then, the IDF is still a mechanized army organized to fight conventional war against similarly equipped opponents. One reason for this is that the only true threat to Israel's existence comes from other states equipped to wage conventional war. Another reason may be that the Israelis found that a mechanized IDF is the best force with which to conduct operations in its operational environment. The implication is that the IDF changed its thinking more than its hardware when it came to solving the new tactical problems of its evolving operational environment. It found new ways to use the equipment it had, and made some organizational changes to increase the professionalism of its soldiers and their efficiency. The U.S. Army should do the same, and avoid thinking about the COE purely in terms of future weapons systems.

The IDF operational environment was not conducive to strategic or tactical pauses. The force in being was the force that conducted operations. The implication, obvious after September 11, 2001, is that the U.S. Army is going to fight the ongoing war with the current force. The window of opportunity has closed, and the U.S. Army cannot expect to have 'down' time to conduct Transformation. Being forced to evolve during ongoing operations may be a good thing,

<sup>&</sup>lt;sup>150</sup> Williamson Murray, ed., *The Emerging Strategic Environment* (Westport, Conn.: Praeger, 1999), xxv.

since ongoing operations should provide lessons that prevent the U.S. Army from making radical mistakes while designing future forces.

With the exception of the opening days of the Invasion of Lebanon, the IDF has not been able to wage the type of war it was designed to fight. Until it withdrew from Lebanon in 2000, it defended fixed positions in a foreign country. For most of both *Intifadas*, the IDF occupied static checkpoints in the West Bank and Gaza. The implication for the U.S. Army is that political reality dictates what ground might be fought over and what battles must be fought. There are potentially many scenarios where the U.S. Army must defend key terrain or secure population centers. Both the ground and the scenarios may be unfavorable to friendly units, and those units should be robust enough to survive and prevail in unfavorable situations.

# **Complex and Urban Terrain**

Political and military realities forced the IDF to fight in both complex and urban terrain.

Although initially reluctant to operate in urban terrain, the IDF adapted by increasing the protection of its armored vehicles and adjusting its tactics. It never suffered a defeat similar to the first Russian experience in Grozny, Chechnya. Because it had proficiently trained mechanized units at hand, it never suffered a Mogadishu. The implication is that complex and urban terrain should be respected, not feared. Planning, preparation and training were more important than weapons systems. If the smaller and less capable IDF can operate in cities and mountains, so can the U.S. Army. The U.S. Army should expand its mounted training in urban terrain, and should include urban terrain in its mounted gunnery tables.

The IDF was heavily dependent upon its combat engineers in both types of terrain, particularly in Lebanon and during the second *Intifada*. Survivable combat engineers gave commanders options. It used engineers to construct survivability positions and conduct mobility operations in the complex terrain of Southern Lebanon. It also used the engineers with armored bulldozers to

demolish buildings in the urban terrain of the West Bank and Gaza. The implication is that combat engineers, particularly armored combat engineers, have a significant role to play in the COE. The U.S. Army needs to ensure that its combat engineers are survivable and capable enough to perform demolition and mobility missions in urban terrain.

### **Information Warfare and Information Operations**

Information warfare and information operations were as much a part of IDF operations in the past twenty years as the weather. The IDF used both SIGINT and HUMINT to collect vast amounts of detailed information in a severely constricted geographical region, much of which became usable intelligence. There were, however, numerous occasions when Hamas or Hizbollah were able to conduct successful attacks against the IDF or Israeli citizens. Not all of those attacks were suicidal, and they continue to this day. The implication is that perfect situational awareness, while an attractive goal, is generally not possible in the COE. Urban terrain exacerbates the problem. Information dominance may not be a viable substitute for force protection and survivability. The U.S. Army should not place too many eggs in the information operations – information warfare basket.

It has become fashionable in some U.S. Army circles to discuss the concept of 'white space,' which describes those areas not controlled by friendly forces and where there are no known enemy units. The IDF experience indicates that those areas not controlled by friendly forces are 'red,' or enemy controlled. The implication is that true situational awareness comes at the cost of friendly troops on the ground. SIGINT and sensors do not portray the entire enemy situation in the COE, particularly in densely populated areas. A lack of conventionally organized enemy units does not indicate a lack of lethal enemies. The U.S. Army should forget the concept of 'white space.' Traditional methods of information gathering like HUMINT and ground reconnaissance should receive the same amount of attention as technology based means like drones and satellites.

The IDF experience showed that in some cases, national and military information operations probably cannot overcome international media and cultural bias, regardless of the circumstances surrounding a particular military operation. The international media overwhelmed IDF information operations in Lebanon during Operation "Peace for Galilee." Despite largely successful attempts to minimize civilian casualties, the world perception was that those casualties were both disproportionate and unnecessary. The implication for the U.S. Army is that military information operations must be nested with national information operations. The U.S. Army should be careful about making any assumptions about the viability of its information operations without understanding the complex relationships affecting all parties in a conflict. It should also be prepared to conduct operations regardless of the success or failure of IO.

# No Homeland Sanctuary Available

The IDF was no more capable of single handedly providing homeland sanctuary for Israel than the U.S. Army would be for the much larger United States of America. Its most effective adaptation was organizational. The IDF discovered during the Gulf War that the civil defense and homeland defense missions were too demanding for reservists alone. The implication for the U.S. Army is that the responsibility for homeland defense should not be left solely to the Army National Guard and the Army Reserve. Homeland defense must include the expertise of the entire Army, as well as State and Federal Agencies.

Another implication is that while perfect homeland sanctuary might be theoretically possible, it is not likely. Israel's proximity to its enemies made its protection of the homeland more difficult. The dozens of suicide bombings in Israel since the 1990s indicate that people with suicidal dedication can penetrate even the best security measures. The World Trade Center attacks demonstrated that the COE contains the same type of enemies. The U.S. Army, along with the other services, should be careful about making promises it cannot keep with regard to homeland

security. Neither the military services nor political leaders should make public guarantees about homeland sanctuary.

#### **Constrained Resources**

The IDF tended to use new technology to improve existing equipment instead of procuring expensive new systems. Existing equipment that could be improved enough to survive against existing threats, like the M60 and M113, was economical to operate and maintain. The implication for the U.S. Army is that upgrading existing systems like the Abrams, the Bradley, and the M113 can save acquisition and training dollars. A heavily upgraded M113 might be more survivable and cheaper to procure than a new fleet of light armored vehicles (LAV) for the interim forces.

Regardless, automotive, armor, and weapons components on all systems should be upgraded with regard to current and future threats in the COE. The acquisition and budgeting systems associated with current vehicle fleets may need to be modified to make future improvements less contentious than they seem to be now.

### Rapidity

The IDF proved itself able to act rapidly on the intelligence it garnered from information operations. The perceived stakes of IDF operations in Lebanon and during the Intifadas were high, and the IDF was able to act rapidly because it was willing to act rapidly. The implications for the U.S. Army pertain to leadership and decision-making. Junior leaders need to be trained to decide and act rapidly at the lowest levels using demanding COE scenarios. Senior leaders need to be trained in the same manner, and they need to know how much leeway they have to act in any given situation. Opportunities for decisive action in the COE are often fleeting. Rapid worldwide communications may not facilitate rapid decision-making if the authority to make critical decisions resides within the Beltway or at some higher headquarters.

# **Asymmetry**

Adaptive enemies, particularly the Hizbollah in Lebanon, regularly sought new asymmetric methods to fight the IDF. The IDF sought countermeasures just as quickly. The implication is that asymmetry is limited only by the imagination and motivation of the participants in a conflict. The U.S. Army should incorporate COE based training scenarios that encourage soldiers and leaders to devise methods to exploit its asymmetric advantages against adaptive opposing forces. It should also analyze methods to defeat potential enemies' asymmetric advantages using existing equipment and organizations. There are probably two or three obvious asymmetrical means to defeat every U.S. weapons system. Those means should become a routine part of tactical training.

Using simulations to create operational and strategic asymmetries for large unit training is probably not enough to make the U.S. Army ready to win in the COE. The current force structure should practice fighting enemies that are tactically asymmetric as well. Hands on tactical training and live fire scenarios that recreate events similar to Mogadishu and Grozny are necessary if the U.S. Army expects to deal with similar situations in the future. Practical training experience also potentially provides realistic input to weapons designers. The alternative is to learn tactical and technical lessons the hard way in combat, as the IDF did in Lebanon.

#### **Force Protection**

The IDF could conduct combat operations in Lebanon for eighteen years in part because it protected its forces there well enough to keep casualties at an acceptable level. It did this by increasing the protection of its existing armor and mechanized units. The IDF did not withdraw because it was militarily forced to do so by the Hizbollah. The implication here is that effective force protection provides options for both commanders and political leaders. Heavy combat losses

can dictate political policy. Since the U.S. Army still has a large armored and mechanized component, it must ensure that the force is survivable in urban and complex terrain. The armor protection of its vehicles should be improved enough to survive known existing threats like RPGs launched at the top and sides, for example. Add-on armor suites are one potential solution.

A related implication is that true force protection is difficult to achieve in the COE without creating extremely survivable vehicles. There was never enough available information to prevent the Hizbollah or the Palestinians from successfully attacking the IDF during sustained operations, particularly when IDF units were relatively static. The IDF did not face the dilemma of deploying its heavy vehicle overseas, but their experiences in Lebanon indicate that erring on the side of protection is prudent. Light armored units that cannot survive in extremely lethal environments can become a liability if they are the only forces available to deploy quickly. While vehicle weight should be minimized, it is incumbent upon the other services to provide the lift necessary to move heavy divisions or brigades. Reconsideration of what constitutes an acceptable time window for deploying U.S. heavy forces may be in order, at least until the technology exists to create light but survivable combat vehicles. If force protection is imperative, then tailor force projection assets to support the U.S. Army; do not tailor the U.S. Army to fit the force projection assets.

# **CHAPTER Six**

# Conclusion

"Every successful and coherent transformation of an organization begins with a clearly articulated statement about what it wants and needs to become... We know that physical change invariably has its underpinnings in imaginative and rigorous thought about the future." General Gordon R. Sullivan <sup>151</sup>

The IDF of 1981 paralleled the U.S. Army of the past few years in many ways. It was a mechanized heavy force designed to conduct operations against a Soviet armed and equipped enemy. It fought and defeated those enemies eight years previously. Beginning with the Invasion of Lebanon, the IDF discovered that there were no peer competitors willing to fight it on its own terms. It struggled to adapt to its changing operational environment, which retained all of its former characteristics and added foreign intervention, guerrilla war and civil insurrection. Some of the ways that the IDF adapted to its new operational environment are relevant to the U.S. Army.

Israel was and remains in a strategic deadlock with the Palestinians and the majority of Arab states. The IDF's inability to innovate or adapt strategically was probably due in large part to the seemingly intractable political problems of the region. Lack of a political solution meant that the IDF would stay in contact indefinitely. Most of the IDF's successful adaptations were thus organizational and tactical, and it is those adaptations that have the most relevance for the U.S. Army.

Operations in complex and urban terrain, asymmetry and force protection were the dominant characteristics of the IDF operational environment and influenced IDF adaptation the most. The IDF seemed to understand that regardless of what measures it took to adapt to its operational

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<sup>&</sup>lt;sup>151</sup> Department of the Army, *TRADOC Pamphlet 525-5*, *Force XXI Operations* (http://www.tradoc.army.mil/tpubs/pams/p525-5cs.htm), introduction, visited 18 September 2001.

environment, it was not going to avoid absorbing some blows from its enemies. It did not have the strategic depth to avoid direct contact with its enemies in unfavorable tactical situations. The logical solution was to increase the survivability of the units in contact. Those units needed to be able to operate in complex and urban terrain against asymmetric enemies searching for new means to inflict attrition and score political victories by doing so. It is reasonable to assume that the U.S. Army could face similar enemies in the future.

The U.S. Army should pay particularly close attention to the way that the IDF adapted its mechanized and armored units to survive in complex and urban terrain. The IDF's operational environment in Lebanon was so hostile that information superiority had negligible impact on force protection. Since everyone was potentially a threat, successful enemy attacks were inevitable over time. Vehicle survivability provided force protection, which in turn gave Israel's political leadership policy options. The U.S. Army faces the dilemma of projecting a force light enough to deploy rapidly and heavy enough to survive. The lethality of the environment should dictate where the commander should accept risk, either with the survivability of the force or the rapidity of the deployment.

The U.S. Army's plan to increase the combat power of its light infantry units by converting some of them into light armored units is logical, but the IDF experience remains a cautionary tale. The missions that those units receive should be carefully chosen, or they could prove to be a liability. If the mission dictates that they be used in a static role to secure complex or urban terrain in a lethal environment the risk of casualties becomes very high. Since the U.S. Army does not choose its missions, it is worth reexamining what type of force it projects to accomplish those missions. Light armored units may be available for a mission, but they might not be the right forces for the job.

None of the findings of this monograph were revolutionary or particularly surprising. The IDF did a fair job adapting to an operational environment quite similar to the COE. There were no IDF adaptations that the U.S. Army could not improve upon, as long as it has the will to do so. The biggest lesson may have been that the army a nation has is the army that fights, and army doctrine and equipment should reflect as much. U.S. Army doctrine needs to remain relevant to the current force, because the current force is the only force there is.

### APPENDIX A

# **Definitions of Terms**

Unless otherwise noted, all definitions come from "Capturing the Operational Environment" 152.

Asymmetric Warfare: Asymmetric warfare focuses whatever may be one side's comparative advantages against an enemy's relative weakness. It encompasses anything - strategy, tactics, technology, organization, or culture - that alters the battle space to give one side an advantage or negate the other's advantage. FM 3-0 says that asymmetric warfare "seeks to avoid enemy strengths and concentrate comparative advantages against relative weaknesses." 153

**Operational Environment**: A composite of all conditions, circumstances, and influences, which affect the employment of military forces and bear on the decisions of the unit commander.

<u>National Interest</u>: Interests that do not affect our national survival, but they do affect our national well-being and the character of the world in which we live.

<u>Transnational</u>: Threats that transcend international borders comprise transnational or transregional threats. Examples include terrorist groups, international crime organizations, drug traffickers, and culturally or nationalistically motivated groups.

<u>Variables</u><sup>154</sup>: Factors or elements that make up the operational framework. When operationalized, they define the conditions, circumstances, and influences that affect the employment of military forces and influence the decisions of the commander. A summary of the variables is in Appendix B.

<u>Vital Interest</u>: Interests of broad, overriding importance to the survival, safety, and vitality of our nation. Among these are the physical security of our territory and that of our allies, the safety of our citizens, our economic well-being, and the protection of our critical infrastructures.

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<sup>&</sup>lt;sup>152</sup> White Paper: "Capturing the Operational Environment", 4-5, 8.

<sup>153</sup> FM 3-0 1-31

<sup>&</sup>lt;sup>154</sup> White Paper: "Capturing the Operational Environment", 10-11.

### APPENDIX B

# **Environmental Variables**

Environmental variables are all from "Capturing the Operational Environment". 155

**Physical environment**: The enemy wants to gain advantage by using complex and urban terrain to deny American advantages in standoff weaponry and electronic intelligence. The enemy minimizes his exposure to American firepower and collection assets by embedding himself in the local civilian population.

<u>Nature and stability of the state</u>: The nature and stability of the state determines whether the strength of the state is the military, the police, or the population. States that commit significant resources to maintain internal control represent less of a threat in conventional combat and more of a threat in stability and support operations. The nature of the state determines how it organizes for war, how it makes decisions, and what its vital interests may be. The nature of the state helps to determine what type of war is being fought.

Sociological demographics: Complex sociological demographics add complexity to the nature of military operations. Complex demographics may also create opportunities for exploitation along ethnic or cultural lines. U.S. operations with the Northern and Eastern Alliances in Afghanistan are examples of exploiting such opportunities. States with sophisticated military capability that are fragmented along cultural or ethnic issues are normally much more aggressive and willing to resort to violence within their regions. Iraq and India are examples of such states.

<u>Regional and global relationships</u>: These relationships define the scale and scope of military operations. Understanding such relationships is a key part of establishing and maintaining situational awareness. Alliances within a region may add significantly to the military capability of an opponent or globally broaden the area of operations. Regional and global relationships impact U.S. ability to establish and maintain coalitions.

<u>Military Capabilities</u>: The most critical variable for military operations and the most complex. Rapid technological change and innovative use of new and old technology generate an environment of constant change and increase the difficulty of establishing a template for threat operations. The conventional force order of battle may no longer reflect the enemy's military capability.

<u>Information</u>: Most potential opponents feel this is the most productive avenue to take to offset U.S. conventional battlefield capabilities.

<u>**Technology**</u>: The presence of advanced technology indicates where opponents expect to achieve the greatest advantage or perceive the greatest threat. Overall technological superiority

<sup>&</sup>lt;sup>155</sup> Ibid., pp.10-11.

does not always translate into local superiority. The enemy exploits off the shelf civilian technologies for military purposes, possibly in unpredictable ways.

External Organizations: The United Nations and regional, non-governmental, and private organizations continue to grow in influence, power, and their willingness to become involved in crisis situations, due increased worldwide situational awareness. World and domestic opinion can be influenced by how a nation works with external organizations. External organizations may influence how the rest of the world views U.S. Army operations. The U.S. may have little or no ability to influence the behavior of external organizations (like the media) during a particular operation.

<u>National Will</u>: U.S. National will is viewed by most states as its center of gravity. The attack and defense of national will has tactical (particulars of the rules of engagement) as well as strategic (prematurely ending an operation) implications. Open, democratic societies may manifest signs of decreased will because of open political discussion, while closed and undemocratic societies' will is difficult to determine. National will often only manifests itself in the regime and its leadership.

<u>Time</u>: Most opponents view time as being to their advantage because they think the United States has no patience or willpower to wage long wars. Time can play a key role in the sustainment of national will. The enemy wants to act quickly before the U.S. can respond with ground forces.

**Economics**: A nation's ability to rapidly purchase military capabilities or conduct sustained operations is based on economics. At the macro level economics influence what a nation considers vital interests. At the micro level economics can impact military operations due to criminal activity, a nation's infrastructure, or official corruption.

### **BIBLIOGRAPHY**

#### **Books**

- Allen, Thomas B., and Norman Polmar. *Merchants of Treason America's Secrets for Sale*. New York: Dell Publishing, 1988.
- Bond, Brian. *The Pursuit of Victory From Napoleon to Saddam Hussein*. New York: Oxford University Press, 1996.
- Esposito, John L. *The Islamic Threat Myth or Reality?* New York: Oxford University Press, 1992, Third Edition, 1999.
- Herzog, Chaim. *The Arab-Israeli Wars: War and Peace in the Middle East from the War of Independence through Lebanon*. First Vintage Books Edition. New York: Vintage Books, 1984.
- Hiltermann, Joost R. Behind the Intifada: Labor and Women's Movements in the Occupied Territories. Princeton, New Jersey: Princeton University Press, 1991.
- Liang, Qiao and Wang Xiangsui. *Unrestricted Warfare*. Beijing: PLA Literature and Arts Publishing House, February 1999.
- Magyar, Karl P., ed. *Global Security Concerns: Anticipating the Twenty-First Century*. Maxwell Air Force Base, Alabama: Air University Press, March 1996.
- Metz, Helen Chapin, ed. *Israel: A country study*. Third edition, first printing. Washington, D.C.: Federal Research Division, Library of Congress, 1990.
- Murray, Williamson, ed. *The Emerging Strategic Environment: Challenges of the Twenty-First Century.* Westport, Connecticut: Praeger Publishers, 1999.
- Norton, Augustus Richard. *Amal and the Shi'a: Struggle for the Soul of Lebanon*. Austin, Texas: University of Texas Press, 1987.
- O'Brien, William V. *Law and Morality in Israel's War with the PLO*. New York: Routledge, Chapman, and Hall, 1991.
- Reich, Bernard, ed. *Arab-Israeli Conflict and Conciliation A Documentary History*. Westport, Connecticut: Praeger, 1995.
- Sandler, Shmuel and Hiller Frisch. *Israel, the Palestinians, and the West Bank*. Lexington, Massachusetts: DC Heath and Company, 1984.
- Shiff, Ze'ev. *A History of the Israeli Army, 1874 to the Present*. New York: MacMillan Publishing Company, 1985.

- Thucydides. *History of the Peloponnesian War*. Translated by Rex Warner. London: Penguin Books, 1954, revised with a new introduction and appendices 1972.
- Turabian, Kate L. A Manual for Writers of Term Papers, Theses, and Dissertations. 6<sup>th</sup> ed. Chicago: University of Chicago Press, 1996.
- Van Creveld, Martin. *The Transformation of War*. New York: The Free Press, 1991.
- Van Creveld, Martin. *The Sword and the Olive: A Critical History of the Israeli Defense Forces*. New York: Public Affairs, 1998.
- Ware, Lewis B. *Low Intensity Conflict in the Third World*. Maxwell Airforce Base, Alabama: Air University Press, 1988.
- World of Information. *The Middle East Review: The Economic and Business Report 1992*. Essex, England: Walden Publishing Ltd., 1992.
- Yorke, Valerie. *Domestic Politics and Regional Security: Jordan, Syria and Israel.*Brookfield, Vermont: Gower Publishing Company, for the International Institute for Strategic Studies, 1988.

#### **Periodicals**

- Barzilai, Amnon. "Israel's response to the ballistic missile threat." *Military Technology*, vol. 24, Issue 3 (March 2000), p. 30, 5 pp.
- Beyer, Lisa. "Courage under Fire." *Time Europe*, vol.155, no.22 (5 June 2000), at http://www.time.com/time/europe/magazine/2000/0605/lebanon.html, 5 pp. Visited 6 November 2001.
- Blanche, Edward. "Lebanon Disaster has deeper consequences for Israeli policy." *Jane's Defence Weekly*, 17 September 1997, p.21, 1p.
- Cohen, Stuart. "The Israel Defense Forces (IDF): From a 'people's army' to a 'professional military'—Causes and Implications." *Armed Forces and Society*, Vol.21, Issue 2 (Winter 1995), p.237, 13pp.
- Crock, Stan. "Sticks and Stones Can Break an Army". *Business Week Online* (27 October 2000), at http://www.businessweek.com/bwdaily/dnflash/oct2000/nf20001027\_861.htm, 3pp. Visited 6 November 2001.
- Diehl, Jackson. "A Radical Shift in the *Intifada*; Violent Tactics Gaining Favor as Uprising Enters 4<sup>th</sup> Year." *The Washington Post*. Washington, D.C.: The Washington Post Company, 8 December 1990, p.10.
- Duncan, Andrew. "Fifty years on, Israel still tied to circles of defence PART ONE." *Jane's Intelligence Review*, Volume 10, Number 9 (September 1998), p.19, 6 pp.

- *The Economist.* "Arab Intifada the armchair version." Vol. 357, Number 8201 (16 December 2000), p.52, 2 pp.
- \_\_\_\_\_. "Gaza Sowing the seeds of destruction." Vol. 358, Number 8205 (20 January 2001), p.40, 7/8 p.
- \_\_\_\_\_. "The Palestinians Arafat's choice." Vol. 361, Number 8252 (15 December 2001), p. 39, 1 p.
- \_\_\_\_\_. "Israel and the Palestinians It can only get worse." Vol. 362, Number 8257 (26 January 2002), p. 42, 2/3 p.
- Eshel, David. "Armored Anti-Guerrilla Combat in South Lebanon". *Armor*, Vol. CVI, No. 4 (July-August 1997), p.26, 4 pp.
- Eisenberg, Laura Zittrain. "Israel's Lebanon Policy". *Middle East Review of International Affairs Journal*, Vol. 1, Issue 3, (September 1997), at http://www/biu.ac.il/SOC/besa/meria/journal/1997/issue3/jyln3a3.html, 13 pp. Visited 13 February 2002.
- Haberman, Clyde. "Palestinian Fury Rising At Enemy Within." *New York Times*, (7 August 2001), pg. 1, at http://ebwest.dtic.mil/Aug2001/s20010807palestinian.htm, 3 pp. Visited 18 September 2001.
- Hammami, Rema and Salim Tamari. "The Second Uprising: End or New Beginning?" *Journal of Palestine Studies*, Vol.30, Issue 2 (Winter 2001), p.5, 21pp.
- Hockstader, Lee. "Guerrillas Fight Israeli Army to Stalemate; Hizbollah Exploits Weaknesses of Its Adversary in S. Lebanon." *The Washington Post* (13 February 2000), A23, at http://www.washingtonpost.com/wp-srv/Wplate/2000-02/13/1991-021300-idx.html, 3 pp. Visited 6 November 2001.
- Hoffman, David. "There's No Black and White; *Intifada* Reshapes Views of Israeli Soldiers." Series: *Intifada* Series Number 2/2, *Washington Post* (8 December 1992), p.1, 5 pp.
- Horowitz, Dan. "Israel's War in Lebanon: New Patterns of Strategic Thinking and Civilian-Military Relations." *Journal of Strategic Studies*, 6 (September 1983), 83-102, reprinted by the U.S. Army Command and General Staff College Combat Studies Institute Book of Readings, A652 Modern Military History of the Middle East, p. 54.
- Inbar, Efraim. "Israel's Small War: The Military Response to the Intifada." *Armed Forces and Society*, Vol. 8, No. 1 (Fall 1991), p. 29, 22 pp.
- Inbar, Efraim. "Israel's national-security challenges." *International Defense Review*, Vol. 27 (July 1994), p. 25, 3 pp.
- Jarbawi, Ali. "The Triangle of Conflict." Foreign Policy, No. 100 (Fall 1995), p. 92, 18 pp.

- Kanter, Noah. "Employing Armor in Low-intensity Conflicts: Some Lessons for the U.S. Armor Force." *Armor*, Vol. CXI, No.1 (January-February 2002), p.6, 9 pp.
- Kalman, Matthew. "Israel Pulls Back Retaliation To Give Arafat Chance to Act", *USA Today*, 6 December 2001, p.6, http://ebird.dtic.mil/Dec2001/e20011206pulls.htm, 2 pp. Visited 6 December 2001.
- Kifner, John. "In Long Fight with Israel, Hizbollah Tactics Evolved." *The New York Times on the Web*, 19 July 2000, http:///www.library.cornell.edu/colldev/mideast/hizbz.htm, 5 pp. Visited 23 November 2001.
- Lewis, Bernard. "Did you Say 'American Imperialism"? Power, weakness, and choices in the Middle East." *National Review*, Vol. LIII, No. 24 (17 December 2001), p.26, 5 pp.
- Liebes, Tamar and Shoshana Blum-Kulka. "Managing a moral dilemma: Israeli soldiers in the *intifada*." *Armed Forces and Society*, Vol. 21, Issue 1 (Fall 1994), p. 45, 16 pp.
- Luft, Gal. "Who is Winning the *Intifada*?" *Commentary*, Vol.112, Issue 1 (July/August 2001), p.28, 6pp.
- O'Sullivan, Arieh. "Report: Chechens Offered 150 Fighters for *Intifada*." *Jerusalem Post*, (9 August 2001), http://ebwest.dtic.mil/Aug2001/s20010809report.htm. Visited 18 September 2001.
- O'Sullivan, Arieh. "Mofaz adapts IDF to the 'Me Generation'." *The Jerusalem Post Newspaper*: *Online News From Israel Features Article* (15 June 2000), http://www.jpost.com/
  Editions/2000/05/09/Features/Features.6430.html. Visited 23 November 2001.
- Partridge, Ira L. "Modifying the Abrams Tank for Fighting in Urban Areas." *Armor*, Vol. CX, No. 4 (Nov-Dec 2001), p.19, 5 pp.
- Peterson, Scott. "In a War It Cannot Win, Israel Tries New Tactics." *The Christian Science Monitor International* (9 October 1997), http://www.csmonitor.com/durable/1997/10 /09/intl.4.html. Visited 6 November 2001.
- Prusher, Ilene. Palestinians Talk of a New *Intifada*." *Christian Science Monitor*, Vol.88, Issue 185 (19 August 1996), p.1, 3 pp.
- Rees, Matt. "The Enemy Within." Time, Vol. 158, Issue 8 (27 August 2001), p.30, 2 pp.
- Satloff, Robert. "The Path to Peace." Foreign Policy, No. 100 (Fall 1995), p.109, 6 pp.
- Scales, Robert H. "Adaptive Enemies Achieving Victory by Avoiding Defeat," *Joint Forces Quarterly*, (Autumn-Winter 1999-2000), p.7, 8pp.

- Smucker, Philip and Anton La Guardia. "Intifada Makes Arab Support Harder to Win." London Daily Telegraph, 15 September 2001, http://ebird.dtic.mil/Sep2001/e20010915-intifida.htm. Visited
- Williams, Daniel and Nick B. Williams, Jr. "Israelis Kill 6 as Palestinian Areas Erupt." *Los Angeles Times*, 21 May 1990, p. 1, 2 pp.
- Wyllie, James. "Israeli Security Current and Future Threats." *Jane's Intelligence Review*, Vol. 5, No. 12 (December 1993), p. 563, 2 pp.

#### Websites

- *Israeli Counter-Terrorist Activity*. http://www.ict.org.il/counter\_ter/ Is\_ct.htm, visited 23 November 2001.
- MSNBC News. "16 Palestinians Die in Israeli strikes." http://www.msnbc.com/news/677951.asp? pne=msn, visited 20 February 2002.
- World Tribune.com. "In first, Palestinians destroy Israeli tank", Middle East Newsline, Tel Aviv, 15 February 2002, http://216.26.163.62/2002/me\_palestinians\_02\_15.html, 2 pp. Visited 15 February 2002.

#### **Government Documents**

- Department of the Army. FM 3-0 Operations. Washington, D.C.: Government Printing Office, 14 June 2001.

  \_\_\_\_\_\_. TRADOC Pamphlet 525-5, Force XXI Operations. http://www-tradoc.army.mil/tpubs/pams/p525-5cs.htm, visited 18 September 2001.

  \_\_\_\_\_. United States Army Training and Doctrine Command Deputy Chief of Staff Intelligence, Combined Arms Center Threat Support Directorate. White Paper: Capturing the Operational Environment. Fort Leavenworth, Kansas: 2 February 2000.

  \_\_\_\_. United States Army Training and Doctrine Command Deputy Chief of Staff Intelligence, Combined Arms Center Threat Support Directorate. The Future Operational Environment. Fort Leavenworth, Kansas: 4 May 2001.

  United States Information Service. Transcript: Clinton Meets with Rwandan Genocide
- United States Information Service. *Transcript: Clinton Meets with Rwandan Genocide Survivors*. http://www.usinfo.state.gove/regional/af/prestrip/w980325a.htm. Visited 11 March 2002.
- Office of the Secretary of Defense. Quadrennial Defense Review Report. 30 September 2001.

# **Papers**

- Cordesman, Anthony H. "Weapons of Mass Destruction in Iraq". Washington, D.C.: Center for Strategic and International Studies, September 20, 1999. CSIS.ORG.
- Hall, Wayne M. "A Few Thoughts on the Meaning of Asymmetrical and Asynchronous. Threats in the Twenty First Century". Fort Leavenworth, Kansas: Asymmetric Warfare Course Reading, School of Advanced Military Studies, 2002.
- Hashim, Ahmed S. "The World According to Osama Bin Laden: A Philosophy of Islamic Action" Newport, Rhode Island: Naval War College, 12 October 2001.
- Metz, Steven. "Armed Conflict in the 21<sup>st</sup> Century: The Information Revolution and Post-Modern Warfare." Carlisle, Pennsylvania: Strategic Studies Institute, U.S. Army War College, April 2000.